

Digitized by the Internet Archive in 2014



Weekly Journal of Pharmacy and the Drug-trade. ESTABLISHED 1859

Head Office: 42 Cannon Street, London, E.C.

Melbourne, Vic. .. Fink's Buildings, Elizabeth Street.

Branch Offices

Sydney, N.S.W. Adelaide, S.A.

.. 114a Pitt Street.
.. 76 Brookman's Building, Grenfell Street.

New York, U.S.A. .. Park Row Building.

SUBSCRIPTION RATES.

Ten shillings a year in advance, post free to any part of the world, including a copy of The Chemists' and Druggists' Diary next published. Single copy, 4d.; Summer or Winter Number, 1s.; Diary, 3s. 6d. Postal orders and cheques to be crossed "Martin's Bank (Limited)."

THIS JOURNAL is regularly supplied by subscription to the whole of the Members of SIXTEEN PHARMACEUTICAL SOCIETIES in the British Empire. The associate Journal The Chemist and Druggist of Australasia, published at Melbourne and Sydney, is also supplied to all Australasian subscribers.

Terms for advertising may be obtained on application to the Publisher, C. & D., 42 Cannon Street, London, E.C.

Prix de l'abonnement: The Chemist and Druggist une fois par semaine, et l'agenda du Chemist and Druggist une fois par an, 12.50 francs par an, franco.

Abonnementspreis: The Chemist and Druggist einmal wöchentlich, und Notizkalender des Chemist and Druggist einmal im Jahre, 10 Mark jährlich, frei in's Haus geliefert.

CONTENTS: Vol. LIX. No. 9 (Series No. 1,127).

	_
PAGE	PAGE
Analysis of Camphorated Min	Gazette 388
Oil 390	Irish News 369
Art of Pharmacy 376	Legal Reports 387
At the Counter 390	Marriages 375
Bankruptcies and Failures 388	Medical Gleanings 373
Business Changes 389	Medicinal Umbelliferæ 374
Chemists' Exhibition 384	New Adulterant of Ber-
Colonial and Foreign News 371	mot Oil 383
Corner for Students 364	New Companies and Com-
	pany News 389
	Observations and Reflec-
East Indian News 370	tions 377
Editorial Comments:—	Personalities 372
The Pharmaceutical Pre-	Recent Wills 389
liminary 378	Scientific Progress 376
Industrial Diseases 379	Scotch News 369
Poisons in Ceylon 380	South African News 371
Notes 380	Trade-marks Applied for 383
English News 365	Trade Notes 372
French News 370	Trade Report 391

NEXT WEEK'S "C. & D."

Our annual Educational number will be published next week—September 7. It will contain full particulars regarding the regulations for qualification in pharmacy, medicine, dentistry, veterinary surgery, and science. This issue is on sale all the year round, and is a particularly good one for advertising all kinds of educational and scientific requisites. Instructions as to advertisements should be sent to the Publisher before Wednesday, September 4

Summary.

NEW WINE LICENCEES are mentioned on p. 365.

Dr. Robert Bindscheidler, manufacturing chemist, of Basle is dead (p. 375).

THE B.P.C. DUBLIN LOCAL COMMITTEE figures in an unusual aspect on p. 376.

Mr. Liverseege communicates further observations on the analysis of camphorated oil (p. 390).

Medicinal Umbellifer, with pictures of some to be found at Kew, are described in an article on p. 374.

INTERESTING OBSERVATIONS ON MATE, which show the commercial article to be a mixture, are printed on p. 376.

Mr. J. W. Lee, manager of the Frame Food Company, was accidentally killed at the factory on August 21 (p. 375).

We report upon the Chemists' Exhibition which has been held in the Covent Garden Theatre, London, this week (p. 384).

"CRAFT," as a designation of the calling pharmacy, is discussed by "Xrayser" on p. 377, and by Mr. James Reid on p. 395.

SEVERAL REMARKABLE FATALITIES WITH POISONS, including methylated spirit given for lime-water, are reported on p. 368.

APPRENTICESHIP TO PHARMACY gives, "Xrayser" thinks, far better prospects to the average lad than a mere clerks hip (p. 377).

THREE CASES of prussic-acid poisoning are reported, one being accidental. All victims were connected with medicine (p. 368).

THE GERMAN PHARMACEUTICAL SOCIETY proposes to create a mark which the members thereof may use on their specialities (p. 371).

THE BILE-BEANS case has been settled, the manufacturers getting a perpetual injunction against a Birmingham retailer (p. 387).

THE DISEASES that affect workers in various industries are the subject of an article on p. 380, in which the causes and treatment are discussed.

Decisions under the Merchandise-marks Act in reference to the use of aërated-water bottles belonging to other makers are reported on p. 388.

Dr. J. C. McWalter has advocated at the Sanitary Congress the addition of naphthalin to methylated spirit, and to schedule the spirit as a poison (p. 381).

DR. SALVATORE GULLI, of Reggio, Calabria, describes in a paper on p. 383 a new adulterant of bergamot oil (hydrochloric turpentine), and the means for detecting it.

THE NEW EDITION of the "Ship-captains' Medical Guide" has been published, and the Board of Trade notify that it only may be supplied with medicine-chests (p. 365).

WILL SUBSCRIBERS who have taken apprentices this year favour us with postcards stating whether or not they have p assed a Preliminary examination? We mention why on p. 379.

Dr. Hill, the Birmingham analyst, makes an effective reply to the Government analysts' report on the sample of tincture of benzoin which he certified to be deficient in quality (p. 366).

DR. CALMETTE has accidentally proved in himself the value of his anti-venomous serum. He was bitten by a snake, and an assistant immediately administered the serum, curing him (p. 370).

THE PERSULPHATES and their applications are well described in the prize essay by Mr. John J. Scott on p. 364. Another essay competition (with questions) is announced under the "Students' Corner"

A POISON ORDINANCE has been passed in Ceylon which requires all sellers of poisons to be licensed, and gives the Governorexceptional powers to make regulations as to storage and sale (p. 380).

A USER OF INCANDESCENT MANTLES, who bought a dozen of Welsbach imitations, has been able to recover from the seller the amount he had to pay to the Welsbach Company for infringing their patent (p. 387).

Continuing our Discussion of the apprenticeship difficulty, we show that the extended Preliminary examination seems likely to increase the unqualified element in pharmacy. Only forty apprentices have registered this year (p. 378).

Business in drugs and chemicals shows no material improvement. Almond oil and peach-kernel oil are both lower. Thymol is dearer, and chamomiles are cheaper. Quinine has been a "waiting" market pending the Amsterdam bark-auctions (p. 391)

Corner for Students.

CONDUCTED BY LEONARD DOBBIN, PH.D.

Students, please note. All communications should be addressed to the Editor of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

All communications and papers must bear the names and aldresses of the writers, not necessarily for publication. The papers of those who ignore this rule are liable not to be dealt with.

AN ESSAY AND QUESTION COMPETITION.

THIS month we invite our correspondents to write a short essay and, in addition, to send in answers to some questions upon matters connected with their chemical studies. Marks will be given for both portions of the competition, and the usual first and second prizes will be awarded to the two students who obtain the highest aggregate marks.

The subject for the essay, which should not extend to more than about 500 or 600 words, is "Fehling's Solution." We wish competitors to give an account of the essential chemical facts of which advantage is taken (a) in the preparation and (b) in the employment of Fehling's solution, but not to enter into any details of manipulation.

Concise answers to the following questions are to be

1. Explain what is meant by the description "20 volume" as applied to a solution of hydrogen peroxide, and state how you would test a sample in order to ascertain whether the description

2. Enumerate the various steps in the ferric-chloride and alkali-acetate treatment in the analysis of phosphate mixtures, and explain the chemical significance of each step

3. The density of a mixture of nitrous oxide and nitric oxide is found to be 17:174 times that of hydrogen. Calculate the volume of each gas present in 100 parts by volume of the

We trust that a large number of papers will be sent in to the Editor, who will receive them up till Monday, September 9.

THE ESSAY ON PERSULPHATES AND THEIR APPLICATIONS.

In response to our invitation of July 27, thirteen essays have been submitted for competition—a result which we regard as by no means unsatisfactory for this holidayseason, particularly as a good deal of careful work has evidently been expended upon their preparation. One or two of the writers deal only with the sulphates related to the higher basic oxides of certain metals, such as iron and copper. These salts are not true persulphates-i.e., they are not salts derived from persulphuric acid, H2S2O2-and their designation as persulphates is certain to be abandoned. Some writers excel in their account of the preparation and properties of the persulphates, others in their account of the purposes to which they have been applied. The various points have all been carefully considered in making the awards.

PRIZES.

The First Prize for the best essay has been awarded to JOHN J. SCOTT, 223 Stanley Road, Bootle, Liverpool. The Second Prize has been awarded to

A. R. THORNEWELL, Spilsby Road, Horncastle, Lincs.

The essays submitted by "Avis," E. G. Fuller, "Hygeia," and "Izal," are commended.

Essays have also been received from "Algol," "Lucifer," "Oath," "Ozokerite," "W. B.," George Wheatley, and

First Prize.—Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Second Prize.—Any scientific book which is sold for about five shillings may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher naming the book or books they select.

We print the First-prize Essay below:-

THE PERSULPHATES AND THEIR APPLICATIONS.

By JOHN J. SCOTT.

The date of the discovery of the persulphates may be traced back to 1878, when Berthelot submitted a mixture of dry oxygen and sulphur dioxide to the silent electric discharge in an ozonis tube. This method of preparation gave an oily liquid, which froze to a white crystalline solid. This solid decomposed readily to sulphuric anhydride and oxygen. Later on it was found that it to sulphuric anhydride and oxygen. Later on it was found that it was also formed round the anode during the electrolysis of concentrated H₂SO₄. Richarz, in 1884, observed the formation of persulphuric acid, and correctly explained it as the result of association of two HSO₄ ions (Wiedemann, Ann., 24, 183). Later on he showed that hydrogen peroxide was also produced during the electrolysis. Berthelot, in 1891 (Comptes Rendus, 1891, 112, 1481-3), took the solution containing a mixture of sulphuric and persulphuric acids as obtained by electrolysis and neutralised carefully by addition of barium hydroxide or caustic potash. The solution thus obtained contains a certain amount of neutral persulphate. This solution, when heated, decomposes rapidly, and becomes acid again with evolution of oxygen gas—

$$K_2S_2O_8 + H_2O \rightarrow K_2SO_4 + H_2SO_4 + O$$
.

If barium hydroxide is used for neutralisation, the solution containing the barium persulphate, BaS₂O₈, can be filtered from the precipitated sulphate, and the composition determined with more satisfaction. The solution, on account of the presence of hydrogen peroxide, gives off more oxygen when treated with ferrous sulphate or KI than that required for the formula BaS₂O₈. The first direct preparation of the persulphates was made by H. Marshall (Journ. Chem. Soc., 1891, 59, 771-776), who discovered the method somewhat accidentally. These salts were obtained by electrolysis of the acid sulphate of the metal, and in certain cases by double decomposition of the ammonium or potassium salts by double decomposition of the ammonium or potassium salts with other salts.

with other salts.

The potassium salt was obtained by passing a current of 3 to 3½ amperes through a saturated solution of acid sulphate of potassium. The solution was placed in a platinum basin, cooled externally by a current of water, and connected with the positive pole of the battery; the negative pole was of platinum wire, and was placed in a porous cell filled with dilute sulphuric acid, and suspended in the solution of KHSO4. The potassium salt separates out in the course of twenty-four to forty eight hours as a mass of white crystals. These may be purified by recrystallisation, dissolving in warm water, and allowing to cool, when tabular, apparently asymmetric, crystals are deposited. They are snaringly soluble in water, 100 parts of water dissolving at are sparingly soluble in water, and affording a neutral solution. They are sparingly soluble in water, 100 parts of water dissolving at 0° C. 1.77 part of the salt, and affording a neutral solution. The dry salt, when heated, loses oxygen and sulphur trioxide according to the equation-

 $2K_2S_2O_8 \rightarrow 2K_2SO_4 + 2SO_5 + O_2$.

The pure salt is odourless, but after keeping some time in a stoppered bottle, a peculiar smell is observable. The impure product evolves ozone.

Ammonium persulphate, (NH₄)₂S₂O₈, is very similar to the potassium salt, but is soluble in water (approximately 1 in 2) and therefore difficult to purify.

The barium salt is prepared from ammonium persulphate and

barium hydroxide, and is soluble in water.

barium hydroxide, and is soluble in water.

The lead salt (which is deliquescent) and zinc and copper salts are prepared with difficulty, and usually in an impure state. Elbs and Schönherr in one of their papers have described a direct method of preparing lead persulphate. The sodium, lithium, and magnesium salts are not prepared directly by electrolysis. Marshall concluded first of all that the oxide, S₂O₇, formed a true acid, HSO₄. This view was borne out by a determination of the preparation of the production of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the salt in dilute account of the conductivity of the conductivity of the conductivity of the salt in dilute account of the conductivity of molecular conductivity of the salt in dilute aqueous solution, in molecular conductivity of the sait in diduce adjacous solution, in comparison with Ostwald's values for the conductivity of potassium perchlorate. Löwenherz (Chem. Zeit. **16**, 838), however, showed that the formula was more probably $K_2S_2O_8$, and a redetermination of the figures for $KClO_4$ showed that an error had been made in the latter case.

By Marshall's method a ready method of manufacture was obtained, and this led Berthelot to make several thermo-chemical measurements connected with the substance (Bull. Soc. Chim 7-8, 1892, 497-522).

Analysis.—Ulzer (Zeit. f. Angew. Chem. 1897, 61) devises the following method. A solution of the salt is heated with a solution of ferrous ammonium sulphate and dilute H2SO4 in a current of CO₂; the excess of ferrous salt is titrated back by permanganate. The total acid is determined by first heating with hydrochloric acid, and precipitation as BaSO4.

Leblanc and Eckhardt (Zeit. für Electrochem. 5, 31, 355) heat to 60° before titration.

Mondolfo (Chem. Zeit. 1899, 23, 69, 699) decomposes the persulphate by KI, and titrates the iodine liberated by thiosulphate.

Rupp's process (Chem. Centr. 1900, 1, 875) is somewhat similar. Namias (Chem. Centr. 1900, 2, 896) allows the solution of the salt and KI to stand in the cold for ten to twelve hours before

Properties.-From what has been said before it will be seen that the persulphates have strong oxidising properties. Ferrous sulphate is converted into the ferric salt. Lead, silver, and copper salts are precipitated as peroxides, while salts of manganese, cobalt, and nickel hehave similarly in the presence of alkali. cobalt, and nickel hehave similarly in the presence of alkali. Hydrochloric acid evolves chlorine, and potassium iodide iodine. Metallic zinc, aluminium, cadmium, and magnesium dissolve up in solutions of the persulphate, while mercury is rapidly attacked. Organic colouring-matter, such as litmus or turmeric, is rapidly bleached, while paper and cloth dipped in it become rotten. Aqueous alcohol is oxidised to aldehyde, while absolute alcohol is unattacked owing to the insolubility of the salt. Chromium to the insolubility of the salt. steel is oxidised to chromic acid—a fact upon which a process for the determination of Cr in steel has been founded.

Applications.—Organic persulphates have been made by decomposing organic sulphates with lead or barium persulphates. The

persulphates of cocaine and quinine are said to he useful as anti-

persulphates of cocaine and quinine are said to he useful as antiseptics and antifermentatives.

It has been proposed to use the salts as hleaching agents and
disinfectants, and on account of the oxidising-properties as a
depolarising-agent in the Bunsen cell.

The potassium salt has been put on the market as a hypoeliminator in photography, but its utility is doubtful, as it also
prohably attacks the image. The salts with organic closed-chain
bodies give sulpho-derivatives.

It has been suggested that lead persulphate plays a part in the

It has been suggested that lead persulphate plays a part in the working of secondary batteries, but this has been shown to be untrue.

Pullinger has shown that the reason that pure zinc is attacked by sulphuric acid is probably owing to the presence of small quantities of persulphuric acid, and that if some reducing-agent, such as hydriodic acid, is added to the sulphuric acid, practically no action at all takes place.

English Mews.

Local Newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Brevities.

Thomas Moody, lately dispenser to Dr. Ackerley of Surbiton, was fined 10s. at Kingston last week for being drunk and disorderly.

A man named Clinton was fined 40s. and costs at Lambeth Police Court on August 26 for assaulting a chemist's assistant at Rye Lane, Peckham.

At Lambeth Police Court on August 27, two men, named Harriss and Gosling, were remanded on a charge of being in the unlawful possession of two dozen syphons supposed to have been stolen.

At Aberavon County Police Court on August 26, a charge against Mr. H. S. Arnold, chemist and stationer, Cwmavon, for selling a bottle of rum after prohibited hours on Saturday, August 17, was dismissed.

At Stratford last week, James Snell (13), errand-boy to Mr. Knights Dack, chemist, 93 Plashet Grove, East Ham, pleaded guilty to stealing 3s. from his employer, and was discharged under the First Offenders Act.

A warrant has been issued for the arrest of a clerk who has disappeared from the head offices of Bovril (Limited), in Old Street, E.C. He is suspected of having systematically defrauded the firm of stamps, to what extent has not yet been discovered.

Mr. J. Taylor, of Bolton, member of the Pharmaceutical Council, has promised to give the inaugural address on October 17 at the opening of the session of the School of Pharmacy in connection with the Sheffield Pharmaceutical and Chemical Society.

An inquest was held at Camberwell on August 26 concerning the death of Augustus Raynor, a chemist's assistant, living at Albany Road, Camberwell, who was found dead in bed. The medical evidence showed that death was due to a fatty heart.

Two foreigners, named Sterjohan and Bohnisch respectively were remanded at the Stratford Police Court on August 28 on a charge of breaking and entering the house of Mr. William Smart, chemist and druggist, at Wanstead, and stealing a carving knife valued at 2s. 6d.

Chemists' Licences.

The Brewster Sessions are now on in various parts of the country, and the following traders have been granted off-licences for the sale of wine :-

Mr. H. Marsh, druggist, South Ossett. Messrs. Law & Hare, chemists, Hexham.

Mr. G. Greenwood, chemist and druggist, Lye. Mr. F. C. Hellett, chemist and druggist, Brighton.

Mr. Richard Needham, J.P., chemist and druggist, Stalybridge.

Mr. Frederick Oatley, chemist and druggist, Market Street, Chorley.

Mr. Alfred Shaw, chemist and druggist, 83 Green Lane, Liverpool.

Mr. W. Moore, chemist and druggist, 132 Ellor Street, Pendleton.

Mr. E. Holland, chemist and druggist, 238 Bolton Road, Pendleton.

Mr. Charles J. Botting, chemist and druggist, 65 Sidwell Street, Exeter.
Mr. W. T. Smith, pharmaceutical chemist, 35 High Street,

Bridgnorth.

Mr. Thomas Gresty, chemist and druggist, 175 Broad Street, Pendleton.

Mr. Alfred Jacklin, chemist and druggist, 30A Wilmslow Road, Rusholme, Manchester.

Mr. W. T. Harlow, chemist and druggist, 188 Palatine Road East, Blackpool, and 86 North Albert Street, Fleetboow

Mr. Samuel Martin Hibberd, managing director of Martyn's Stores (Limited), for premises at 38 Church Street, Bilston.

At Ely Licensing Sessions on August 21, the wine-andspirit licence held by Mr. A. Howard, pharmaceutical chemist, Fore Hill, Ely, was transferred to Miriam Howard.

At Newmarket Brewster Sessions, on August 27, Mr. J. W. Carr, chemist, High Street, applied for an off wine-licence. The Justices postponed their decision to the adjourned Licensing Sessions.

The wine-licence attached to the pharmacy in Market Square, Crewe, formerly belonging to Mr. Shrubsole, has been transferred to Mr. Charles Sangster, chemist and druggist, who has recently acquired the business.

At Prescot Licensing Sessions on August 21, Mr. G. G. Hemingway, chemist and druggist, Prescot, applied for a licence to sell wines, spirits, and beer. A licence for wines and spirits was granted, but that for beer was refused.

Cricket.

A match was played in the Wholesale Chemists' and Druggists' Cricket Championship Competition on August 24 at Brockley between Davy Hill's C.C. and Kindrug (Dakin Brothers) C.C., when the former scored 113 and the latter 20. For the winners Sibley hit up 22, and Collins and Dean each obtained 20; whilst G. Tombs took 8 wickets for 4 runs, performing the hat-trick. The League table, inclusive of August 24, is as follows:-

Club	Matches played	Won	Lost	Points
Davy Hill's Burroughs, Wellcome's* Kindrug Burgoyne, Burbidge's* City Mills	6	6	0	12
	7	6	1	12
	5	2	3	4
	7	1	6	2
	7	1	6	2

^{*} Including match scratched by Burgoyne, Burbidge's C.C.

On Saturday, August 31, Davy Hill's C.C. play Burroughs, Wellcome's C.C. at Bowes Park.

London Industrial Health.

The report of the chief officer of the Public Control Department of the London County Council for the past year has been published since our last issue, and it contains a few items of interest to our readers. For example, in respect to the Shop-hours' Acts, 115,353 inspections were made, and 9,204 offences were discovered. In many cases it was found that the assistants under 18 years of age were worked over eighty hours a week, and a number of the offenders were prosecuted and fined. There were 1,088 shops in which sufficient seats were not provided for the assistants, the West-end being as bad as any other part of London in this respect. Lamp-accidents numbered 2,259, involving the loss of 302 lives, low-flash petroleum being the chief source of the accidents. Another interesting topic dealt with in the report is the decay of public buildings. Complaints have been especially made that the decay of Lambeth Palace and Westminster Abbey is largely attributed to the fumes of hydrochloric acid emitted in the salt-glazing process at the Lambeth potteries. The chief officer has investigated the matter with the help of the chemist, and finds that the decay of the stonework of Westminster Abbey and Lambeth Palace is not more serious and rapid than that of other stone buildings in London. Moreover, before the Lambeth potteries were established attention had been directed to the bad condition of the stone on the outside of Westminster Abbey, and it is reasonable to infer that the decay is due partly to the great age of the buildings, the natural decay of which has no doubt been accelerated by the generally smoky atmosphere of London, and partly to the fact that much of the stone used is not well suited to resist such an atmo-

Birmingham Notes.

Mr. Simmons's business at King's Heath, after twentyseven years' successful trading, is advertised to come under the hammer on September 5.

A Polytechnic Exhibition at the Bingley Hall, organised with the ultimate object of founding bursaries in the Birmingham University, was opened with great *éclat* by the Lord Mayor on Monday. It remains open until November 2.

The Birmingham Bottle Association are instituting proceedings against persons using mineral-water bottles illegally. At West Bromwich Police Court on Monday two offenders were mulcted in fines and costs for using other people's bottles for their own productions.

Mr. C. J. Evans, pharmacist, Harborne, has left his old premises and gone to a new shop and house a little higher up the High Street, on the other side. There are only three of the fraternity in this large suburb of Birmingham, where much building is going on, and trams are to be laid from the centre of the city to the heart of this Staffordshire colony.

Students of crystallography will be pleased with an exhibit which Messrs. Bellamy & Co. have unconsciously afforded them. In their window, exposed to the southwestern light, some tablets of naphthalin are exposed, and the strong solar light has sublimed the stuff on to the glass in fantastic forms, the chief being feather, fan, and fern like forms.

A curious bull appears in the *Pharmaceutieal Journal*. Writing on the sale of dangerous drugs, our contemporary thus delivers its soul: "The point that escapes so many of our worthy colleagues of the pen is that whilst the present restrictions are stringent enough and reasonably effective in themselves, the means of evading them are legion." We should imagine that this is a point which would escape the worthiest colleague of an obviously Irish pen.—*Birmingham Gazette*.

At an inquest held regarding the death of a man from chloroform-anæsthesia in the local workhouse infirmary, it transpired that, apart from the fact that the man was an unfavourable subject for an anæsthetic, analysis of the chloroform had shown that the fluid in the stock-bottle was pure, but in the drop-bottle it had partially deteriorated, and there was a little oily residue, which the analyst thought was due to an unclean bottle. Decomposition had

not set in, and the change that had taken place was not sufficient to affect the patient. It is strange, nevertheless, that chloroform in such condition was used at all. There have been four deaths from chloroform during the past fortnight in this district. One medical man had one case, which was the first in 250.

A letter to the *Post*, signed by A. E. Knowles, manager of the Birmingham Oxygen-works, reviews the "wonderful discovery" re oxygen by M. Pictet, of Geneva. He recalls that a Birmingham worthy, whose memory is perpetuated by a fine monument in Victoria Square—Dr. Priestley—discovered it in 1771, and only in 1885 could it be said that a commercial process had been discovered—that of the brothers Brin, who spent 80,000l. in perfecting the process. The *Daily Mail* has said that oxygen is to be now made at \(\frac{1}{4}d \). per cubic foot in place of 4s, the present price. This Mr. Knowles regards as "bunkum," for the average price for the past twenty years has been about $1\frac{1}{2}d$. per foot. He shows that the new process is not likely "to revolutionise metallurgical work," for a company, started in Birmingham in 1890, was to do this, yet not 10l. of the gas is sold for this purpose to-day.

Amongst district news the Post records the death of a child (3 years and 9 months) from poisoning by wild berries at Chedworth. Dr. Ryan, at the inquest last Wednesday, said he had identified the berries as "cornelian cherries." The fruits known to botanists as cornelian cherries are those of Cornus mascula (belonging to the cornel or dogwood order), and possess astringent properties, which are also shared by the leaves and flowers. It is difficult to understand how they can be poisonous unless they are unripe, because the Turks, to whom they are known as "krama, eat them on account of their agreeable acid flavour and use them in their beverages and sherbets. The small and red fruits of the C. succica, the dwarf dogwood, are eaten as food by the Esquimaux, and in the Highlands of Scotland they are called "lus a chrasis" (glutton-plant), as they increase the appetite. C. sanguinea, the common dog wood, has black globular drupaceous fruits, which are very bitter. Cornus Horida yields the U.S.A. bark substitute. In face of all these statements of botanists, it is difficult to understand how poisoning could arise from such a cause.

Dr. Hill and Government Chemists.

Dr. Alfred Hill, F.I.C., Medical Officer of Health for Birmingham, in his quarterly report states that six out of seven samples of camphorated oil analysed were of full strength or The seventh sample only contained 8 per cent. of The vendor was fined 5l. and 8s. costs. samples of compound tincture of benzoin was of satisfactory strength (175 to 186 grammes of solid extract per litre), but a seventh sample yielded only 147 grammes of solids, and the vendor was prosecuted (C. & D., July 6, page 24). He required the reserved sample to be sent to the Government laboratory, who certified that it afforded no evidence of being below B.P. strength (C. & D., August 3, page 251). The case was withdrawn. Referring to this matter Dr. Hill says if he had obtained an opportunity of giving evidence before the magistrates in support of his certificate he could have shown them that he had complete proof of the accuracy of his analysis, and the reasonableness of his standard. Three determinations of the amount of solid extract in the tincture gave very concordant results, and these were confirmed by the very low sp. gr. of the sample. His standard for calculation was 180 grammes of solid extract per litre—a standard which has been advocated by a well-known manufacturing chemist, and also the analysts to the Chemists' Defence Association. A sample prepared in his own laboratory yielded 182 grammes per litre, and twenty-three samplesbought from various chemists in the city and submitted to him since the issue of the 1898 B.P., gave an average of 180 grammes. The average of the whole of the samples received, including two adulterated ones, is 176 grammes. Of these twenty-five samples the two above mentioned, containing respectively 115 and 147 grammes of solid extract, were certified as adulterated, and the vendors were prosecuted and fined 201. and 51. respectively; two, containing 158 and 169 grammes of solid extract, were somewhat deficient in strength; and the remaining twenty-one samples contained 174 to 201 grammes. In the face of these-

figures Dr. Hill affirms that he cannot conscientiously pass a sample containing only 147 grammes per litre as genuine, and he feels it is neither fair to the public nor to careful chemists and druggists, as it puts a premium on the use of inferior ingredients. Benzoin, the chief ingredient in this tincture, is required to be "almost entirely soluble" in alcohol, and some commercial samples contain 30 per cent. of bark. If the prescribed quantity of such a sample is used for preparing the tincture instead of one of the official quality, the resulting tincture must be of a very inferior strength. The Editor of the Pharmacopæia, in his 1898 report, remarks that "benzoin containing the usual varying proportions of bark (1 to 30 per cent.) may be employed, but allowance must of course be made for the insoluble matter, so that 1 pint of the official tincture shall be prepared from 2 oz. of benzoin and not from 2 oz. of benzoin and bark. Apparently the sample in question had been prepared from "benzoin and bark," and how the chemists at Somerset House could say that it afforded "no evidence of being below the process described in the British Pharmacopeia," excites Dr. Hill's wonder, and passes his comprehension, unless they made for their guidance a standard tincture from benzoin and bark instead of from benzoin. "It is," he continues, "most unsatisfactory, not to say disheartening, that the certificate of a public analyst, who has given special attention to the subject, should be discarded in favour of one giving no analytical details and no standard," for he feels sure that if the case had been fully heard, and the Somerset House chemists made to state their analytical results and submitted to cross-examination, the magistrates must have convicted the defendant. "It was only last year," he concludes, "that a case of a kind exactly similar to the one in question resulted in a penalty of 5l. and costs."

The "Ship-captain's Medical Guide."

The Board of Trade has issued a notice to masters and owners of ships, calling their attention to the issue of a revised edition of the "Ship-captain's Medical Guide," which has recently been sanctioned by the Board. In accordance with the provisions of Section 200 of the Merchant-shipping Act, 1894, every ship navigating between the United Kingdom and any place out of the same is required to have on board a copy of this publication, together with medicines and medical stores according to the scales issued by the Board. Owners and masters of ships are informed that the present edition supersedes all previous editions, and that it is of the utmost importance that this edition should in all cases be procured and kept on board ship.

Government Scholarships.

The Board of Education has awarded National Scholarships for chemistry (as the result of the science examination in May) to Herbert B. P. Humphries (18), student, London; Alfred Shepherd (24), cotton-weaver, Ramsbottom, Manchester; Alfred Berry (19), demonstrator, Small Heath, Birmingham; Donald Levy (19), laboratory assistant, Manningham, Bradford; and Sydney H. Smith (17), student, Hull; also free studentships for chemistry to Joseph A. Stokes (20), laboratory assistant, Normanton, and John F. Stansfield (22), teacher, Morley, Leeds. These scholarships are held at the Royal College of Science, South Kensington.

Roger E. Grime, who is awarded a National Scholarship in physics, is a son of Mr. James Grime, chemist, Darwen, and is only 16 years old.

Guardians and the Drug-supply.

The Monmouth Board of Guardians on August 16 discussed the question of raising the salary of the workhouse medical officer, Dr. Prosser, who had held the appointment for twenty years. The salary is 30% a year, and out of this Dr. Prosser supplies medicines and drugs, which cost, it was said, at least 7s. per week. One of the members stated that a chemist in the town had complained that, although the Guardians appointed a chemist to the Board, the medical officer only purchased a few things for the workhouse upon which but a little profit was made. The Clerk said the medical officer found all medicines and everything in the nature of physic out of his salary, and only "medical necessaries," such as disinfectants, &c., would be purchased from the appointed chemist. Although the Local Government

Board recommended an increase of 20% a year, only half that sum was granted by the Guardians.

Free Diarrhœa-mixture.

The medical officer of health for Manchester (Dr. J. Niven) reports that the deaths from diarrhea and English cholera, which in the six preceding weeks had averaged 62 per week in that city, numbered 105 last week. In addition to this number there were seven deaths classified in the register as due to other diseases, with diarrhea ascribed as a secondary cause. The precautions against summer diarrhea have now been circulated by the police at every house in the city, and diarrhea-medicine is being supplied to poor people from the police and fire stations and other public buildings.

A Russian Medical Missionary.

Robert Tchertkoff (44), a Russian, described as a medical man and missionary, was charged, on remand, at Stratford Police Court on August 24, with the manslaughter of Arthur Victor Wightman, aged seven months, the child of a Walthamstow warehouse-clerk. The prosecuting counsel said a coroner's jury had brought in a verdict to the effect that the death of the deceased had been accelerated by improper treatment. The child had been attended to by the prisoner, who was not a registered practitioner in England. The child was suffering from eczema, and prisoner was called in and gave the child some medicine. It got the better of a rash that it had had, but gastric troubles arose, and eventually the prisoner took Dr. Baxter to the house, but the child died that day, and the prisoner asked Dr. Baxter to give a certificate of death. Dr. Baxter declined, and a post-morten examination showed that death had resulted from gastric catarrh and diarrhea, caused by improper feeding. The child had been given various kinds of patent food at the suggestion of the accused. Since the inquest three bottles of medicine which had been supplied by the prisoner had been analysed. One contained a mixture of bismuth and ammonia—a perfectly right mixture to give. The contents of the other bottles were quite harmless. The analyst stated that the life of the child might have been prolonged, but the "might" was not good enough to warrant proceedings against the accused, and the prosecution was withdrawn. Mr. Eliot Howard (the Chairman) said he hoped the prisoner realised the serious position he had placed himself in, and would refrain in the future from practising as a dector without the necessary certificate. The case might come before the Court in another manner. The accused was then released from custody.

The Mandrake-merchant.

At Southwark Police Court on August 24, William Hawkins, gardener, was charged with disorderly conduct in Old Kent Road. A police-sergeant said the prisoner caused a crowd to assemble. He was hawking mandrake, which he had obtained somewhere in the country, and which was supposed to possess medicinal qualities. Not content with puffing his own goods, the prisoner was depreciating those of a chemist, outside whose shop he had taken his "pitch." The prisoner said he had carried $\frac{2}{4}$ cwt. of mandrake all the way from Eltham. He valued his stock of mandrake at 2L; one of the mystic roots, which bore some resemblance to the body of a child, with rudimentary limbs, took him seven hours to dig. He had been travelling the home counties for thirtyfour years, and worked very hard for a living. His only implement for digging up the roots was a table-knife. The Magistrate imposed a fine of 5s., or five days' imprisonment.

The Dispenser's Derangement.

At Brentford Police Court, on August 23, William Worsley, described as a chemist, surrendered to his bail on a charge of obtaining 1s. by fraud from a Mr. Brown, of Hounslow. It was stated that defendant was dispenser to Dr. Andrew Gordon, and that he obtained sums of 1s. from several of the doctor's patients by representing himself as his agent. Mr. Williams, solicitor, said he represented all the parties in the case. Defendant's conduct had been ascertained to be the result of an illness which he had recently undergone, and which had caused something like mental derangement. The charge against accused was thereupon dismissed.

Bentley Bound Over.

The painter, Arthur Bentley, has been found guilty at the Clerkenwell Sessions of attempting to obtain, by means of a forged order, a dozen distemper-brushes from Messrs. G. B. Kent & Sons (Limited), of Farringdon Road, E.C. The circumstances have been reported in previous issues (see C. & D., August 10, page 289, and August 17, page 297). Bentley had hitherto borne a good character, and urged that he innocently carried the order, which was handed to him by a man who represented himself as a foreman of a well-known firm. He was accordingly bound over.

Poison-storage in a Workhouse Infirmary.

At the King's Norton Union Infirmary, Selly Oak, Birmingham, on August 24, an inquiry into the circumstances attending the death of an aged and bedridden inmate of the institution, named Ann Dolley, was held. The deceased had been in the infirmary between two and three years, and her back was daily bathed with methylated spirit to prevent bedsores. Nurse Wright told the Coroner (Mr. A. E. Hebbert) that on August 6 she took what she thought was the bottle of methylated spirit from the lotion-cupboard, and without looking at the label applied the contents to the back of the deceased. She then discovered that the bottle was labelled "Pure carbolic," and applied vaseline. The bottle containing the carbolic acid should have been in the poison-cupboard, but another nurse had put it in the lotion-cupboard by mistake. A third nurse had also removed the methylated-spirit bottle for use in another ward. Both bottles were produced, and it was seen that they were of the same size, colour, and appearance. The one was labelled "Methylated spirit," the other "Pure carbolic." On the carbolic-bottle were two other labels—"Not to be taken" and a red "poison" label—but, said the nurse, the labels had been added since the occurrence. At that time the carbolic-acid bottle simply bore a white "poison" label in addition to the one describing its contents. Ten days later the deceased was attacked with diarrhoea, and, although not the cause of death, Dr. Hollinshead was not prepared to say that the accident might not have accelerated it. The Coroner suggested that it ought not to be possible in such institutions for mistakes like this to be made. He pointed out that a chemist was not allowed to put poison in an ordinary bottle. The jury, while agreeing that death was due to natural causes, expressed the opinion that the poison should have been put into a bottle different from the ordinary bottle, and that it should have been labelled "Poison" with a red label. They thought, too, the person who put the poison-bottle in the lotion-cupboard should be censured, and that Nurse Wright should be censured for not looking at the label before using the poison. The Coroner added that in such an institution there should be printed labels, and no need for the nurses to indicate in writing the contents of

Prussic Acid Poisonings.

In Guy's Hospital on August 28, Dr. F. J. Waldo held an inquest on the body of Mr. William M. Ogilvie, M.R.C.V.S., aged 26, leading assistant to Messrs. F. S. Stanley & Sons, veterinary surgeons, Borough, who had died from prussicacid poisoning. The evidence of his brother, Mr. Stuart Grant Ogilvie, M.D., Westcalder, Midlothian, and others showed that he had gone into the dispensary to get a dose of chlorodyne, and had taken prussic acid in mistake. With this evidence the jury agreed.

The death of Patrick O'Sullivan (34), dispenser to Dr. Allt, of 424 Clapham Road, was inquired into by a coroner's jury on August 23. The widow said deceased had been in Dr. Allt's employment for nearly two years. He failed recently in an examination to qualify himself as a medical man, and had been much depressed since. Dr. Ellis, locum-tenens for Dr. Allt, deposed that deceased entered the consulting-room and told him he had taken 1 oz. of prussic acid. Witness immediately gave him an emetic, another medical man was sent for, and the stomach-pump was used, but deceased became convulsed and expired. Further evidence showed that the suicide was premeditated, and the jury returned a verdict of suicide whilst mentally deranged through overstudy.

An inquest was held at Doncaster on August 25, on the body of Mr. Joseph Halliwell, manager to Messrs. Hodgson & Hepworth (Limited), chemists, St. Sepulchre Gate, Doncaster. The evidence showed that the deceased was worried by financial difficulties. An assistant in the pharmacy, Mr. F. G. Perkins, found deceased in an outhouse dead, with a small bottle, which had contained prussic acid, by his side. Perkins said the acid was kept locked up in deceased's desk, and was only accessible to him. A verdict of suicide whilstof unsound mind was returned, and sympathy was expressed with the widow and six children, who are left.

The Week's Poisonings.

The poisoning fatalities reported since last week bear some unusual features. Thirteen fatal cases are reported, nine of which were due to scheduled poisons-hydrocyanic acid (three), carbolic acid (two), laudanum, cyanide of potassium, oxalic acid, and a liniment [containing aconite, belladonna, morphia (?), and laudanum] being the cause of one death each. In the last case, the husband of the woman who drank the liniment said he had it made up from a friend's prescription for neuralgia. Besides the death of a child from taking methylated spirit in place of lime-water (reported elsewhere), a child died at Portsmouth after drinking a quantity of paraffin oil. Another child, 2 years old, at Padiham, drank a quantity of turpentine, dying shortly afterwards; while yet another, nearly 4 years old, ate what she thought were "red gooseberries" at Chedworth, near Cirencester, and died two days later. At the inquest on August 21 a botanist identified the fruit found in the child's stomach to be that of the Cornelian cherry, which a doctor said was an irritant poison.—Several cases of attempted suicides with poison are alleged. A woman named Emily Boyd appeared at Stratford on August 26 charged with attempting to kill herself with a mixture of carbolic acid and whisky. She was remanded.—At Gravesend a young shoemaker was indicted for swallowing a quantity of oxalic acid with intent to poison himself. He told the doctor who saved his life that he had taken the poison for a bet.—A young woman named Preston appeared at Westminster for the second time this month to answer charges of attempting suicide. time she had swallowed a mixture of ammonia and carbolic acid, and was found semi-unconscious.-At Margate a young woman named Shilston was charged with attempting suicide by taking morphia tablets which she had obtained from John Bowen, assistant at Mr. Victor J. Woolls's branch establishment, 72 Northdown Road, Cliftonville. Mr. Bowen said accused had purchased a tube of twelve $\frac{1}{2}$ -gr. morphia tablets. He had served her with similar tubes before. Shilston was sent sent to the Quarter Sessions for trial.

S.V.M. for Lime-water.

An inquiry was held at Walworth, on August 27, into the circumstances of the death of Violet May Luck, aged 12 months, who died after being dosed with methylated spirit, supplied in mistake for lime-water. Ernest Albert Hodson, chemist and druggist, manager to Day's Metropolitan Drug Company (Limited), at 301 Walworth Road, took the blame for the mistake. The bottle was filled by a boy in the shop, aged 15. The Coroner: Is this boy in the habit of dispensing? Witness: No; he is casually called when we are busy "to put up" bottles. The Coroner: Does he make up prescriptions? Witness: No. The Coroner: You told the boy to put lime-water in the bottle? Witness: Yes. The Coroner: How came he to make the mistake? Witness: I do not know. A Juror (examining the bottle): It looks to me as though he had started on the lime-water and finished with the methylated spirit.

Mr. W. H. Warburton, who watched the case for the company, said that he admitted the firm had made a mistake, and they very much regretted it, but he thought this was a very different case to a mistake being made in making up a prescription.

The Coroner: I fail to see it; the sequence is just the

Dr. J. Hutchisson, of 44 Rodney Road, stated that the child had taken six teaspoonfuls.

The jury returned a verdict of death from misadventure, and added a rider that in their opinion there was great carelessness on the chemist's part. He ought to have seen that the proper drug was supplied to the customer, and the press of business was no excuse at all.

Fire.

Damage to the extent of 150*l*. was done by a fire which occurred on August 18 at the residence of Mr. Furnival, manager of Mr. H. E. Noble's pharmacy in Westgate, Peterborough. The house adjoins the pharmacy, which was undamaged.

Irish Mews.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Drowned whilst Bathing.

On August 20, Mr. Peter Donovan, described as a chemist, of Ballybunion, went bathing, and after a short time he was found dead by a deaf mute named Williams, who was also bathing. Death was due to failure of the heart's action, and at the inquest, on August 21, a verdict to that effect was returned.

Sulphate-of-copper Poisoning.

An inquest was held at Ballymena, co. Antrim, on the body of James Gordon, Ballee, who died on August 21. He was engaged in spraying potatoes on Monday and Tuesday, and was taken ill on the Tuesday night and died next day. Two doctors who were called in deposed that death resulted from collapse following an irritant poison, possibly absorbed from the solution of sulphate of copper used in the spraying-machine. Gordon had a fresh wound on his hand, which one of the medical men described as "perfectly blue with the 'bluestone.'" He had on the two evenings before he died taken his tea in the field without washing his hands, and another medical witness pointed out that the weather was warm, and in breathing in the fine vapour the deceased had probably absorbed a considerable quantity of the poison

An Aquatic Family.

At the recent aquatic sports held at Dalkey, co. Dublin, Mr. W. B. Conyngham (of the staff of Messrs. Parke, Davis & Co.), when on his holidays leaped into the water and rescued a gentleman who had been cautioned not to enter the sea as it was too rough (the sports having eventually to be abandoned on that account). The gentleman persisted in entering the water, and but for the timely aid of Mr. Conyngham would have perished. The moment he was observed in difficulties there was a shout for Conyngham, who is well known as an expert swimmer, and in an instant he sprang to the assistance of the man, with the result that both got safely to land. A few days after Mr. Conyngham's younger brother rescued a young friend who got weak and unable to return to shore. On the following Saturday his fourth brother (Mr. Cecil T. Conyngham, a student at Trinity College) carried off the 100-yards swimming prize against all comers in the club match, making an easy win. The prize was a tea-and-coffee service.

Dispensers' Salaries.

Mr. W. O. Rowlette has been appointed apothecary to the Sligo dispensary, at a salary of 1l. 10s. per week, during the absence on leave of Mr. Denning.

Recently the Local Government Board refused to sanction an increase of 20% per annum which the Dingle (co. Kerry) Board of Guardians granted to the workhouse apothecary; but the Board of Guardians are determined, if possible, to carry the matter, and they have unanimously decided to ask the Local Government Board to confirm the increase.

In the case of Dr. Hanrahan, of the Castle Street dispensary, Dublin (whose increase of 15*l*. a year the Local Government Board also refused to sanction, *C. & D.*, August 24, page 334), the Finance Committee of the South Dublin Union, at the Board-meeting on August 21, reported on the matter, and urged that the increase be granted. Mr. John Byrne, guardian, in supporting the increase, said that Dr. E. F. Hanrahan was appointed nineteen years ago at 125*l*. a year, and had had no increase since. Had he been a

Civil servant the apothecary's salary would have risen by increments every five years until it reached the maximum. The Finance Committee's recommendation was unanimously adopted by the Guardians, and the L.G.B. will again be asked to sanction the well-merited increase to Dr. Hanrahan.

Will only Analyse Drugs.

At the last meeting of the Macroom Board of Guardians (co. Cork) a letter was read from the analyst to the Board, Mr. D. J. O'Mahony, Cork, in which he stated that under no circumstances could he undertake to do any other work than drugs submitted to him under Article 36 of the Dispensary Regulations. That, he said, was the rule followed in other Unions, and any other samples analysed had to be paid for separately. Mr. O'Connell (guardian) said that Mr. O'Mahony ought to be given a yearly salary, and let him stick to that or resign. Mr. McCullough (guardian) said that Mr. O'Mahony was not conforming to the terms of the advertisement. Mr. C. J. Kelleher (guardian), thought that Mr. O'Mahony was not bound to do these things by the agreement made with him at the time of his appointment. The Board decided to send the samples to another analyst, to pay the latter the fee, and to charge the amount to Mr. O'Mahony.

Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Edinburgh Pharmacy Golf Club.

The fifth monthly competition for the Dick Medal was played over the Braids last week. Mr. A. C. Aitken was the winner.

Carbolic Acid Poisonings.

Hugh Fleming Rankin (38), a Glasgow brass-finisher, but out of employment, died from carbolic-acid poisoning on Monday. He took the poison while in a depressed state.

A Glasgow woman, named Mary Martin, who kept a large number of cats, had several bowls of carbolic acid placed here and there about her house for the purpose of disinfection. She, however, drank a quantity of the acid in mistake for whisky on August 24, and died shortly afterwards.

Business Change.

Mr. Robert H. Gordon, chemist and druggist, of Dunchattan Street, Dennistoun, Glasgow, has opened a branch business at 448 Duke Street, Dennistoun. The premises, which are situated in the heart of a growing residential district, are elaborately and tastefully fitted, and are lit with electricity.

Students at the Exhibition.

On August 24, the students of the West of Scotland College of Pharmacy were personally conducted over a portion of the Glasgow International Exhibition by their principal, Mr. T. S. Barrie, to see what was of pharmaceutical interest.

St. Louis Exhibition.—President McKinley has issued a proclamation inviting foreign nations to take part in the exhibition to be held at St. Louis in 1903, in celebration of the centenary of the purchase of Louisiana.

PROFESSOR WANKLYN exhibited at the annual meeting of the British Medical Association, samples of cacodyl and cacodyl red pigment, both discovered by Bunsen in 1837, which are so rare that the Professor doubted whether they could be matched in England at the present time.

PAYING DEARLY FOR HIS WHISTLE.—A manufacturer of a hair-restorer has been prosecuted for illegally using a medal and diploma of the late Paris Exhibition for advertising-purposes. The defendant said he paid a Mulhouse firm 250f. for the two, and also for the right to use them. He pleaded good faith, but was fined an amount equal to his outlay. The prosecution of the hair-restorer man was due to a delicate attention on the part of a competitor.

french Rews.

(From our Paris Correspondent.)

PASTEUR MONUMENT FOR PARIS.—In connection with the proposed Pasteur statue for Paris, an attempt is being made to make it a national monument. The idea is that every Frenchman and resident in France should become a subscriber, and amounts from $\frac{1}{2}d$. upwards will be received. Subscription-lists have been distributed in large number amongst heads of business-houses, manufactories, and Government offices, inviting them to collect sums, however small. The idea is that the lists shall be ultimately bound together and placed in the Pasteur Institute at Paris.

BURGLARY AT A DENTIST'S—M. Maxime Drossner is proprietor of a dental institute at 2 rue Richer, Paris, and occupies two floors of the house. On the first floor are the operating-rooms, and on the second the mechanics' rooms, where a dozen workmen are usually engaged. The foreman takes the keys of the second floor every morning from the concierge on arriving, and leaves them there again in the evening. Last Saturday morning, when the foreman arrived at 8 o'clock, he found that the mechanics' rooms had been entirely ransacked. Everything worth taking had been carried off, including the stock of gold used for making plates and stopping teeth. M. Drossner's only resource was to lodge a complaint with the police, as no trace of the robbers was discovered.

STAGE FRIGHT.—A Paris specialist, Dr. Hartenberg, has been collecting data regarding stage-fright, which attacks actors and actresses in different ways. It appears it cannot be called nervousness, and the most experienced players get it, but cannot explain how or why. The following are said to be the symptoms experienced by some of the leading Paris "stars": Mme. Pierson when attacked has a sensation much resembling that of sea-sickness. With Mme. Bartet it produces pain and constriction in the thorax, with violent palpitation, perspiration, trembling, and dryness of the throat. M. Worms gets a very dry mouth and throat, which much distresses him. M. Paul Mounet has nervous twitching of the fingers, and Mme. Baretta's jaws will not remain quiet, but try to chatter. With M. le Bargy it is the calf of the leg that plays tricks, twitching and trembling. Most other artists get internal symptoms more or less unplesant, and altogether the vagaries of stage-fright are many and curious. Dr. Hartenberg says that the only cure is to leave the stage.

ANTI-VENOMOUS SERUM -There was an incident of a dramatic nature last week at the Pasteur Institute at Lille. The hero of it was Dr. Calmette, the inventor of the antivenomous serum. He keeps a number of snakes for purposes of experiment, and was engaged in an operation which consisted in extracting venom from the poison-fangs when one of the reptiles bit him. The poison of this particular snake is so virulent that under ordinary conditions death would only be a matter of minutes. Fortunately, one of Dr. Calmette's assistants had the presence of mind to suggest an immediate injection of the serum. It was no sooner said than done. The injection was a strong one, and proved effectual, the only result being a swollen hand and feverish symptoms. Next day Dr. Calmette appeared before the local General Council to plead for the establishment of a sanatorium for consumptive patients, and obtained a favourable hearing. His right hand was bandaged, and he appeared to personify the character of the modern scientist; for not only had his own life been saved by serum of his own invention, but it was at the same time a practical demonstration of its efficacy.

INOCULATING TUBERCULOSIS.—A well-known Paris authority—Dr. Brouardel, who is opposed to Koch's theory—has expressed himself as entirely against Dr. Garnault's determination to be inoculated with bovine tuberculosis in order to ascertain by this practical demonstration whether or not the disease can be communicated from cattle to man. Dr. Brouardel says that nothing would be shown if Dr. Garnault escaped the disease except that he was not a propitious subject, and also nothing would be proved if he did contract it. In his (Dr. Brouardel's) opinion there is no doubt that bovine tuberculosis is infectious to human beings. Dr. Nocard,

director of the veterinary school at Alfort, is also of the opinion that the course Dr. Garnault proposes is useless. Dr. Garnault, who is at present at Berlin, writes that he has had a long interview with Dr. Koch. They exchanged ideas in English, which both speak fluently. The German scientist said that the experiment, if carried out, should be made, not by inoculations, but by drinking unboiled milk for some months. Dr. Garnault intends to drink milk infected with tuberculous bacilli for a year, and to have himself inoculated with hypodermic injections of bovine tuberculosis every two or three months during the same period.

A NEW MESSIAH.—The Pa:is police are just now investigating the doings of a so-called magician, who has been thriving in the Clichy quarter of Paris for the last five years. He started in life as a working upholsterer, but now claims the title of the "New Messiah." Healing diseases, fore-telling the future, and interpreting dreams come within the scope of his professed talents, but his great skill appears to be in extorting money from credulous people, for he has been making an income equivalent to 3 000L per annum. The patients are received in a large room containing a flaming altar, and the proceedings open by four costumed attendants placing a huge figure of the Virgin in brorze thereon, while incastations are sung. When the desired effect of awe has been produced the "Messiah" begins his consultation. The fees range from 20L to 600L, and one woman is said to have disbursed 2,400L. To complete the description of this up-to-date Cagliostro, it may be added that a handsome carpeted staircase, decorated with palms, leads up to his rooms. Liveried attendants receive the patients, and besides the altar, which is similar to that used in churches, the "Messiah's" room contains various pictures including one of the Sacred Heart, also a coffin which is used in certain ceremonies. The walls are hung with red damask. The favourite time for carrying on his "cures" or ceremonies is between midnight and 3 A.M. "I cure maladies that are reputed incurable," says the magician. "and have restored a patient in the last stage of cancer, From the palm of the hand I foretell the future, and I cast spells." Amongst his worldly goods the "Messiah" owns a country château.

East Indian Mews.

Messrs. Amritlal Nathoo Thakor & Co have recently opened a chemists' and druggists' shop at 60 Kalbadevi Road, Bombay.

Mr. J. Bliss, of Karachi and Quetta, is a passenger by mail-steamer for a trip to the old country. He must not be confounded with Mr. F. Bliss (of E. Plomer & Co., Lahore), who is at present in England.

METHYLATED-SPIRIT REGULATIONS IN BOMBAY.—From August 1 the retail sale of methylated spirit is covered by a special licence valued at 50r. per annum, the Commissioner of Abkari and Customs deciding who shall be granted such licences. Meanwhile the sale by retail has come to a standstill in the Bazaar. It is now required that all dealers in methylated spirit shall store the article in a building entirely separate from the rest of the business-premises. In several quarters it is said that the object of the Government regulations is to prevent certain malpractices by manufacturers in Bombay, in which a European firm is said to be concerned. The measure has caused a certain amount of discontent, the sale of spirit being at the best so small as to make it hardly worth while to take out a licence. The licence does not, of course, apply to the sale of methylated spirit, not manufactured or produced in India, in its original casks or packages as imported, or in small quantities as bonâ-fide samples.

OPIUM AND GANJA.—According to the Administration Report of the Mysore Excise for 1899-1900, 18,748 seers (1 seer = 2 lbs.) of ganga and majim was consumed, against 18,434 seers for the previous year. The collection under ganga revenue aggregated 57,921r., against 52,688r., and the retail shops opened to meet the want of consumers numbered 199, against 190 in the previous year. No mention is made of opium in the report beyond the fact that there are 117 retail shops for the sale of the drug, which is an increase of four on the previous year.

South African Mews.

(From our Colonial Correspondents.)

Mr. J. E. Pickford has been granted a licence to practise as a chemist and druggist in Natal.

THE FOOD AND ADULTERATION BILL has passed the third reading in the Natal Legislative Assembly.

BRANDY-TAX IN RHODESIA.—Just prior to the departure of the last South African mail, the Customs Tariff Amendment Bill was read a third time in the Legislative Council of Rhodesia. It contains provision for a tax of 6s. per gal. on imports of Cape brandy, or, as it is known in South Africa, "Cape dop."

RUSSIAN DISPENSING.—Some little time ago, a Johannesburg doctor wrote a prescription for sodii sulph., 3j; syr. aurant, 3j.; tr. gent. co., 3j.; aq ad. 3viij. It was dispensed by a Russian firm of chemists, and two days later, the patient (a woman) brought the bottle to the doctor saying, "doctor, must I eat the rocks," the bottle containing the sodium sulphate in pieces the size of 5-gr. pills.

PLAGUE-NURSE DEAD.—Nurse Alice Darley, who was a passenger on the ill-fated *Tantallon Castle*, and comparatively a recent arrival in Cape Colony, was found dead in bed on the morning of August 4. Death, it is said, was due to an overdose of morphia, which she was in the habit of using for sleeplessness. The deceased lady came to South Africa in connection with the plague, and was on the staff at the Uitvlugt Hospital, near Cape Town.

TRADE-MARKS.—Messrs. Wilkinson, Heywood & Clark (Limited), varnish-makers, London, have applied to the Registrar of Deeds for the Cape Colony, for the registration of three distinct devices as trade-marks, covering chemical substances in Class 1, gums, resins, oils (seeds, fish, animal, vegetable, and mineral), not included in other classes. Sponge, dyes (other than mineral), and tallow, in Class 4; also oils, lubricating and otherwise, grease and starch, in Class 47.

BUSINESS IN JOHANNESBURG.—Refugees who return here from the coast, soon get disgusted with Johannesburg (writes a correspondent), paying half rent and no trade, so that they wish they were back to the coast again. With few exceptions, all the chemists' shops are now open, but very little or no business is doing, as there is no buying population in town. The 5s a day which is being paid to the workers on the few mines that have again started running does not keep them in drinks.

HOFFMAN'S DROPS PROSCRIBED.—During the last week in July a chemist, Walter Miles Pole, who has a shop in Braamfontein, one of the suburbs of Johannesburg, was fined 30l. or a month, for selling Hoffman's drops (sp. æth. co.) to natives, who have taken it as they cannot procure any other spirit. All the chemists have been warned by the C.I.D. not to sell to natives spirits in any form, including Hoffman's drops, eau de Cologne, and red lavender. Pole's advocate did not help his case much by saying Lord Roberts had no right to issue such a proclamation, and that as the war was not finished, anyone could sell what they pleased.

THE ROYAL TOUR.—In connection with the preparations for the reception of the Royal visitors (see C. & D., August 24, page 336), the Cape Ovl, in its usual jocular manner, suggests an arch of local products a propos the arch of butter-boxes in Melbourne, but could not find enough of any one or more things, so built one on paper with what is imported, placing the principal Cape products—red tape, rebels, and Cape dop—on the top, and crowned the lot with a press-censor.—A Natal correspondent sends us particulars of the extensive preparations which were made in Maritz-burg and Durban for the visit of the Duke and Duchess of Cornwall and York. Numerous triumphal arches were erected in the principal thoroughfares en route, and the streets were lined with decorated poles. Their Royal Highnesses and suite were escorted to the Natal port by the South African Fleet under the command of the Admiral.

Colonial and Foreign Mews.

FORMOSAN OPIUM-MONOPOLY.—An interlocutory judgment has been delivered in the Kobe law courts in the action brought by Mr. R. Hughes against Mr. F. J. Bardens as the representative of Messrs. Samuel Samuel & Co., claiming a share in the profits of the Form san opium-mon poly business. The point upon which the interlocutory judgment was given was whether Mr. Bardens was the legal representative of his firm. The Court decided he was not, and therefore the claim against him was invalid.

THE APOTHECARY AND THE TINKER.—In the island of Kos, some days ago, an apothecary named Stephen Stavraki called in a Jewish tinker to solder a tin receptacle containing spirit of wine. While the operation was going on an explosion occurred, and both men were terribly burnt. They ran out of the shop with their clothes on fire. Stavraki made straight for the Ægean sea, into which he jumped. He was afterwards conveyed to the military hospital, but the tinker died of his injuries.

CALCIUM-CARBIDE INDUSTRY.—The position of the continental carbide of calcium and acetylene-gas lighting industry has become so depressed in consequence of over-production, competition, and decline in prices as to cause serious apprehensions, and in the case of Germany the Government now proposes to afford protection to the trade under the new tariff by imposing an import-duty of 4m. per 100 kilos. An indication of the situation in Germany, where there are comparatively few waterfalls available for obtaining cheap power for the electrical production of carbide of calcium, is afforded by the report of the Hera-Prometheus Company of Berlin. This company, which was formed in 1899, now find it necessary to reduce the share capital from 1,200,000m, to 400,000m., and to write off entirely the value of 210,600m. at which the patents are booked. The first year resulted in a loss of 14,900l, and the deficit has been increased to 29,700l. in the year which has just closed.

German Glass-bottle Trade Strike —No fewer than 4,700 glass-bottle makers are on strike in Germany, and there is every reason to believe the struggle will be a protracted one, as the masters have resolved to act in harmony on every point in the dispute, while the workmen are equally determined. The present dispute arose at the factories of Mr. H. Heye, at Schauenstein and |Nienburg. In July last year the hands at Schauenstein struck for more money, and seven months later those at the Nienburg factory, seeing that there was no prospect of an early settlement, also came out on strike. Mr. Heye had the support of the Masters' Association, which, it is stated, was supplying bottles to his customers, and hence a general strike was resolved upon at the works belonging to the Masters' Association. On Sunday, August 25, the triennial Conference of the International Union of Glass-workers will commence at Hanover, and this dispute will be discussed.

GERMAN PHARMACY.—The agenda of the general meeting of the German Pharmaceutical Society (Apotheker Verein) includes a proposal for the introduction of a proprietary mark for specialities manufactured by members of the Society. The President of the Society recently published the fundamental clauses of the proposed conditions attending the use of the mark. Amongst these are the following:-(1) That the preparations must be prepared in accordance with particular conditions. (2) The preparations must have particular packing, prices, and labels. (3) Any advertiscments, publications in the press, &c., in connection with the preparations must be subjected to conditions drawn up by a committee to be appointed for the purpose. The members of the Verein will also be responsible to this committee or Board of Control for keeping all regulations as to the use of the mark. This Board will be under the direction of the President, and will use the office (Neue Friedrichstr. 43, Berlin C.). The cost of the undertaking will be defrayed by a small entrance-fee, by the sale of the mark, and by fines for the infringement of the rules. If the general meeting agrees to the proposal, as soon as a hundred members are assured the department will be finally constituted. The members will then appoint the committee, whose first duty will be to issue the regulations referred to.

Trade Motes.

MESSRS. J. M. DAVIS & SONS, 89 Bishopsgate Without, E.C., have been appointed wholesale agents in Great Britain for the preparations of the Rose Remedy Company of St. Albans.

SPRATT'S IN THE ANTARCTIC.—The liner Arcadia has sailed with a further supply of stores for the Discovery, including a considerable quantity of Spratt's patent cabin and navy biscuits for the members of the National Antarctic Expedition. The wants of the canine workers are also catered for by Spratt's.

A BOTTLE PRICE-LIST.—Messrs. Johnsen & Jörgensen (Limited) are strong on price-lists. They have three, and all are striking in appearance and excellently produced. The latest is an imposing illustrated catalogne of bottles for dispensing, for proprietaries, for stock, and for show. Bottles of all kinds, pots, jars, and measures are included in this list, which is meant specially for chemists, retail and manfacturing, and the sundries trades.

HOOPER'S PILLS COUPONS.—The competition for 101. 10s. in prizes, offered by Messrs. May, Roberts & Co., for the greatest number of coupons from Dr. John Hooper's female pills has just been closed, the awards being as follows:—First prize (51. 5s), to Mrs. P. Greenaway, 34 Himley Road, Gornal Wood, near Dudley, Staffs (95 coupons); second prize (31. 3s.), to Mrs. W. Thomas, Post Office, Lower Gornal (45 coupons); and third prize (21. 2s.), to Mrs. Hunt, 4 Newland Street, High Wycombe (43 coupons).

DR. PIERRE'S DENTAL PREPARATIONS.—Messrs. A. Chouet & Co., of Paris and 44 Conduit Street, London, W., the proprietors of Dr. Pierre's dentifrice and other dental preparations, inform us that they have found it necessary to establish minimum wholesale and retail prices for these preparations, which (no doubt owing to their popularity) have been made the subject of special cutting by certain stores. A full list of the fixed prices is given elsewhere in this issue, and it is to be hoped that these prices will be maintained; indeed, there is a possibility of increasing the margin of profit somewhat further, as for preparations of this character full prices should more easily be obtained.

THE CAUSE OF DAISY'S SUCCESS.—The 10*l.* prize for the best letter on this subject is to be shared by Mr. Herbert Bailey, Portsmouth, Mr. J. P. Riddle, South Shields, and Messrs. S. Gill & Son, Pendleton; and four consolation prizes, consisting of four dozen 7½ d. Daisy, are awarded to Mr. E. Gane Inge, Haslemere, Surrey; Messrs. Hickman & Son (Limited), Eastover, Bridgwater; Mr. Frederic J. Keene, Oldbury; and the Plymouth Co-operative Drug Company. The seven letters are printed in our advertisement section, and they make good reading. Mr. Riddle's epigrammatic utterance—"Daisy's success rests on two foundations—viz., the friendly support of the trade and the appreciation of the public"—being one of the neatest compliments to Daisy (Limited).

Sandalwood oil has been made by the firm of "Oranje," of Amsterdam, who have recently issued a booklet giving valuable and detailed information regarding the wood and its oil. The first twenty-six pages are devoted to the narrative by a member of the firm, who expressly undertook a voyage to Mysore to obtain first-hand information as to the supply of raw materials and to investigate the condition of the sandalwood-industry generally. His account of the journey shows that he met with considerable success throughout, and, as a result, he describes in detail the procedure adopted at several of the sandalwood-auctions where he was a buyer. Following the narrative are extracts from Dr. George Watt's "Dictionary of Economic Products in India" and other works. Mr. J. L. Pigot, the Government Conservator of Forests in Mysore, who is an authority on sandalwood-cultivation, also contributes a monograph. He advocates certain changes in the methods governing the production of sandalwood, in order to maintain and increase the outturn. At the present time an annual supply of some 2,300 tons is assured, but unless more rigid measures are adopted he believes there is a possibility of the sandal supply

being endangered. The pamphlet concludes with some contributions to the knowledge of East Indian sandalwood oil by M. Potvliet, and an article on santalol, both containing useful scientific data. Mr. F. Boehm, 16 Jewry Street, E.C., who is the agent of "Oranje" in this country, supplies samples and quotations of their essential oils to wholesale buyers.

Personalities.

MR J. F. STEELE is general manager of Cheltine Foods (Limited), not managing director as stated last week.

MR. THOS. HOLDEN, chemist and druggist, Sandy Lane, Royton, has been elected to a vacancy on the Urban District Council.

At the first meeting of the newly elected Edmonton School Board Mr. Joseph H. Bolton, chemist, of Southgate, was again elected the Vice-Chairman.

MR. HIDEO YOSHIDA, of the Imperial Trading Company, Todamatchi, Yokohama, and formerly of the Imperial Agricultural Department, Tokyo, is now in London on a business visit.

MR. WESLEY J. LAMBERT, F.C.S., sometime chemist to the Imperial Ottoman Arsenal at Constantinople, has been appointed chief chemist of the Royal Gun Factory at Woolwich.

MR. W. G. STRATTON calls our attention to the omission of the word "not" between the words "does" and "claim," in the first line of the concluding paragraph of his interesting shop-notes in the C. & D. last week (page 340).

MR. HENRY P. THOMPSON, 93 Aldersgate Street, E.C., has returned from a successful business trip to the United States, having arranged for a number of agencies, including the sole agency for the bath-sprays which were mentioned in our American letter of August 17.

MR. JOSEPH HINDLE, chemist and druggist, Blackburn asks us to state that he is not Secretary of the North-East Lancs Chemists' Association, that office now being filled by Mr. G. B. Pickworth, 72 Victoria Street, Blackburn, to whom any communications on Association matters should be addressed.

Mr. George Senter, B.Sc., pharmaceutical chemist, 1895 Bell scholar and 1896 Pereira medallist, has, as a student of University College, been awarded 150%, by the Commissioners of the 1851 Exhibition. These scholarships are for the object of promoting research by the holders, usually in a continental university.

THE LATE MR. GEORGE SMITH (of Smith, Elder & Co.) has left a fortune of upwards of 700,000l. Referring to this, Mr. Labouchere remarks in Truth:—"I do not fancy he can have made any money as a publisher. Mr. Smith's wealth was really derived from the Apollinaris water, as he was the half-owner of that lucrative property until the concern was converted into a limited-liability company."

MR. EDWARD EVANS, JUN., chairman of the Committee of the National Liberal Federation, has resigned the chairmanship of the Liverpool Liberal Federal Council. The Times explains that Mr. Evans's sympathies with the Liberal Imperialists is the cause of this rupture. At a meeting of the Council on Monday evening a resolution was adopted regretting Mr. Evans's resignation, and stating that the Council felt that the political principles which both they and he had maintained could be best forwarded by Mr. Evans's continuance in the office of President of the Liverpool Liberal Federal Council. They therefore declined to accept the resignation. On Tnesday it was ascertained that Mr. Evans had agreed to withdraw his resignation. A flood of letters from all parts of the country urging him to continue his office had poured upon him, and he feels that he has no alternative but to retain office.

RED v. BLACK RUBBER.—During a B.M.A. discussion on the treatment of hernia of children, Dr. W. M. Eccles mentioned that the truss used should be covered with black rubber, as red rubber was very apt to excoriate the skin.

Medical Gleanings.

A SIGN OF MUMPS.

In a recent epidemic of true mumps, Dr. F. Tresilian, of Enfield, noted that Stenson's duct on the inner surface of the cheek outside the second upper molar assumed the form of a bright red papilla, and lasted as such for a week or more. This sign does not appear to have been previously noted.

TREATMENT OF WHOOPING-COUGH.

Dr. W. J. MIDELTON, writing to the *British Medical Journal*, gives it as his opinion that by combining apomorphine with quinine and belladonna he best acquires the beneficial effects of the last-named. For a child of five years of age each dose contained $\frac{1}{20}$ gr. of apomorphine, and about 1 gr. of quinine, and mv. of tincture of belladonna.

GLYCOGENOL

is the name given to a white powder soluble in water, with a slight opalescence, and insoluble in alcohol and ether. It is said to be of the nature of glycogen, but its chemical composition, or the way it is prepared, have not yet been published. Glycogenol is said to be useful in the treatment of tuberculosis and enteric fever, and is given by hypodermic injection or by the mouth.

ENTERIC OR TYPHOID FEVER.

THE frequent use of both of the above terms has given rise to the question as to which is the more correct term. The term typhoid fever was first employed by Louis in 1829, and is perhaps the more frequently used. On the other hand, enteric fever is the term adopted in the official nomenclature of the Royal College of Physicians, and in the official returns of the Registrar-General and Army Medical Department.

ICHTHYOL IN ECZEMA.

For the eczema of the menopause there is no drug or combination of drugs, says Mr. Malcolm Morris, of such service as ichthyol. He recommends its administration either in sugar-coated or keratin-coated tablets. The latter is preferable, as the keratin does not dissolve until it gets into the intestine, and thus the objectionable eructations of ichthyol are obviated. The dose is $2\frac{1}{2}$ gr., gradually increased to 10 gr., after each meal.

BISMUTOSE

is a combination of bismuth and albumen containing 22 per cent. of albuminous substance. It is an insoluble white powder without colour or taste, but becoming slate coloured on exposure to light. Bismutose is not acted on by the gastric juice, but is rapidly attacked by the pancreatic juice. On this account it has been employed in diseases of the stomach and in diarrhœa and vomiting of children Externally it is of use in eczema and burns.

THE CURE OF LEPROSY.

In a recent issue of the British Medical Journal Dr. G. Thin records two cases of leprosy, which he thinks were cured by the use of drugs. In one case a lad of 11 was treated with chaulmoogra oil internally and externally for about three years, and recovered. In the second case nerveleprosy was diagnosed, and the treatment prescribed was 5-per-cent. pyrogallic-acid ointment to be rubbed on the patches with drachm-doses of gurgun oil containing 2 minims of Fowler's solution, administered internally twice daily. The ointment was ultimately increased in strength to $7\frac{1}{2}$ per cent., and a complete cure was effected.

ANTAGONISM OF ATROPINE AND MORPHINE.

EXPERIMENTS as to the antagonistic action between atropine and morphine conducted by a continental observer show that the best effects are obtained in clinical practice by the injection of not more than $\frac{1}{42}$ gr. of atropine—more is waste and does harm no matter what quantity of morphine has been taken. The antagonism is incomplete, and the possibility of the atropine reinforcing the morphine and increasing its effect is probably the cause of the controversy on the subject. It has not been ascer-

tained, however, whether morphine can avert death from atropine-poisoning in the same way as atropine with morphine-poisoning.

OX-SERUM IN RECTAL FEEDING.

DR. O. F. F. GRUNBAUM records in the *British Medical Journal* results he has obtained by the use of ox-serum, glucose, and milk, with liquor pancreaticus in rectal feeding. Ox-serum contains a constant amount of proteid, is easily absorbed by the mucous membrane of the large intestine, inexpensive, and does not require any tedious preparation, but simply the addition of a preservative (2 gr. of chloretone to each ounce of serum). Carbohydrates in the form of starch and glucose are readily absorbed when given in solution by the rectum, and if the strength is less than 15 per cent. it is well retained and not irritating. Fat is not easily absorbed by the mucous membrane of the intestine.

BOILS AND CARBUNCLES

are probably due to a micro-organism. The strictest antiseptic precautions should therefore be taken with them in order to prevent infection. Dr. Birdwood recommends scrupulous attention to the personal cleanliness of the patient, and when the boil first appears the locality should be shaved and sprayed with carbolic lotion, then dried and covered with a soft antiseptic pad. A child with boils should be isolated from other children, irritating soaps should be avoided, and when suppuration is established the discharge should be received on absorbent antiseptic dressings. Spraying the boil with a 1-in-40 solution carbolic lotion twice a day for ten to fifteen minutes is recommended, and small plugs of lint saturated with pure carbolic acid thrust into the mouths of carbuncles are said to accelerate suppuration, and to allay irritation.

CONSULT THE CHEMIST-OPTICIAN.

According to a medical authority at least 50 per cent. of cases of chronic headaches are due to eye-strain. Headaches of ocular origin are frequently due to very slight errors of refraction, but it is only in about 25 per cent. of cases of refractive error that headache occurs; and of all forms of refractive error the one which is most frequently the cause of headache is astigmatism. Thus of 123 cases of refractive error associated with headache, 90 were cases of astigmatism, 28 cases of hypermetropia, and 5 cases of myopia. Of the 90 cases, 40 were cases of hypermetropic, 31 cases of myopic, and 19 were cases of mixed astigmatism. A very small amount of astigmatism, 0.5 to 1 D., is very frequently the cause of the headache; these errors cause an excessive strain to be thrown on the ciliary muscle. Suitable glasses will in many cases not only correct the error of refraction but also relieve the headache.

DYSENTERY-TREATMENT.

THE saline treatment of dysentery is the subject of a note by Dr. W. J. Buchanan, Superintendent of the Central Prison, Bhagalpur, Bengal, who has used the method in 855 cases with only nine deaths. Sodium sulphate 3j., dissolved in aqua fœniculi 3j., was given four, six, or eight times a day, as the case required, and the saline continued till every trace of blood and mucus had disappeared from the stools. Where the disease is chronic or relapsing the saline is only used for one or two doses, soda and bismuth or salol with an occasional dose of castor oil being the treatment in such cases.

Since the above treatment was noted, Dr. R. A. Mate, of Dundee, Natal, gives the following mixture as the one he has used in South Africa for the last four years in the treatment of dysentery:—

Mag. sulph. ... Ac. sulph. dil. mx. ••• ... gr. j. Quin. sulph. ... Tr. opii ... ••• mx. ... ••• ... Hydrarg. perchlor. ... $gr. \frac{1}{32}$ Aq. menth. ad

Every three hours.

Dr. Mate mentions that antiseptic irrigation (ac. boric. 3j. to Oj.) gives great relief.

Medicinal Umbelliferæ.

IN the large order of *Umbelliferæ* there is a general absence of woody stems. Perhaps amongst the purely ornamental plants the most noble forms of the Umbelliferæ occur, and these are to be found in the genus Heracleum; but these plants lose some of their interest for us, as they are devoid of any medicinal properties. There are, however, amongst the doremas and ferulas some fine species that are especially ornamental and, moreover, hardy, and, further, of considerable interest as yielding a portion at least of the gum-resins asafetida, ammoniacum, and galbanum. Four of these plants we figure, the materials for which have for the most part been furnished by living plants at Kew; only two of them, however, have flowered—namely, Ferula tingitana and F. galbaniflua. The flowers and fruits of the other two have been added from drawings made from the native-grown plants. Sufficient, however, of the habit of the plants will be gathered to show that they are most desirable additions to a garden of sufficient size to accommodate them. They are not showy garden-plants—few of the *Umbelliferæ* are; but their general habit, and in some cases graceful, and in others peculiar, foliage, are sufficient to recommend them, especially to a pharmaceutical gardener; and for such a few words on the plants and their products may be useful.

The first, *Ferula Narthex*, is a plant of some considerable size, throwing up a flower-stem 8 or more feet high in its native habitat. The Kew plant is not more than about 2 feet



FERULA NARTHEX.

high, and has not flowered—indeed, after flowering the habit of the plant is to die. It owes its discovery to Dr. Falconer, who found it in 1838 in Western Tibet on the slopes of the mountains dividing that country from Kashmir. From the plants thus collected seeds were sent by Dr. Falconer to the Edinburgh Botanic Garden, and these germinated, and the plants continued to grow till 1858, when two of them developed flower-stems and were killed by frost; but in 1859 several other plants flowered, one producing and ripening a number of seeds, which were distributed to the various botanic gardens, the plants contained in such gardens being obtained in this manner. This particular plant, which died after flowering, produced from its flower-stem a small quantity of asafetida. This plant has been accredited as the source of Tibetan asafetida, but it has more recently been shown that the asafetida of European commerce is the produce of Persia, and furnished by Ferula fætida. Dr. Aitchison, who probably knew more

of the economic plants of Afghanistan than any other man of his time, in his "Notes on the Products of Western Afghanistan and North-Eastern Persia," describes the collection of asafetida from F. fætida and its transference to



FERULA TINGITANA.

Herat. The last edition of the British Pharmacopæia throws no direct light on the question, for a safetida is there described as the "gum-resin obtained by incisions from the root of Ferula fætida, Regel, and probably other species," so that the plant we figure may yet be proved to be a source



DOREMA AUCHERI.

of commercial asafetida. It may be interesting to state, on the authority of Dr. Aitchison, that the young tender flowerspikes of *Ferula fatida* form an agreeable refreshing article of food to the natives, who cut slices from them and eat them raw. On the subject of ammoniacum a considerable amount of confusion has existed; and bere, again, the British Pbarmacopeia does not enlighten us very much, for the following is the description at the head of the notice on ammoniacum: "A gum-resin exuding from the flowering and fruiting stem of Darema ammoniacum, D. Don, and probably other species." There seems to be but little doubt that this plant does yield the bulk at least of commercial ammoniacum; but some interest attaches to the two plants we figure under Darema Aucheri and Ferula tingitana, for it is considered with some degree of authority that the ammoniacum employed by the ancients for fumigating-purposes was not identical with that now used, but was distinguished as African ammoniacum, and is attributed to F. tingitana; while Darema Aucheri, which has a wide range in the western provinces of Persia and the neighbourhood of Ispahan, yields a very good quality of ammoniacum.

Ferula galbanifua (the fourth of our illustrations) is, at the time of writing, in flower at Kew, having thrown up its



FERULA GALBANIFLUA.

flower-spike to a height of some 4 or 5 feet. It is a native of Northern Persia, where the soft green root-leaves are greedily eaten by camels. The flowers are of a brilliant orange-yellow, making the plant very attractive. The gumresin known as galbanum is described by Dr. Aitchison as exuding from injuries to the stem from the earliest stage of growth. "It is of an orange-yellow colour, which slowly hardens, forming on the stem like the grease on a guttering candle, and possessing, in common with the whole plant, when crushed, a strong odour resembling that of celery. The gum is commonly found adhering to the lower portions of the stem, and is so tenacious that when subsequently examined pieces of the plant are frequently found attached to it. No artificial means are employed to my knowledge in the collection of this drug. It is stated to be an article of export through Persia via the Gulf to Arabia and India." Other species of Ferula, as F. rubrieaulis, are said to yield galbanum. Though at present used to some extent in medicine, galbanum was by the ancient Jews used as an ingredient in incense.

FRECKLE-LOTION.—Vaseline 1 oz., lemon-juice 1 fl. oz., elderflower-water 10 oz., white-wine vinegar 1 oz., Jamaica rum 1 oz., alcohol 1 oz. Sponge on face after washing, let dry, and then rub in a very little good cold-cream. This item is going the newspaper rounds at present. It will take a smart compounder to make a presentable lotion of it. Vaseline oil is better than the semi-solid variety.

Marriages.

DINWOODIE—BINNEY.—At St. Mary's Cburch, Johannesburg, on July 29, by the Rev. Mr. Shaw, James Herbert Dinwoodie, chemist and druggist, to Elizabeth, daughter of Mr. H. E. Binney, Ilkley Hall, Yorkshire. Miss Binney had been nursing soldiers in Natal, and was matron of the Harrismith O.R.C. Hospital immediately before her marriage.

KAYE—MASON —At Macmaster's Temperance Hotel, Perth, on August 28, by the Rev. J. W. Henderson, B.D., Alexander Kaye, chemist and druggist, to Rachel Beattie, daughter of the late Mr. Thomas Mason, chemist, Perth.

NOBLE—MELVILLE.—On August 22, Charles A. Noble, chemist and druggist, Hove, Brighton, to Mollie, youngest daughter of Mr. S. Melville, Nunhead, S.E.

Wells—Fitton.—On August 28, at Wortley Parish Church, by the Rev. W. C. Allan, assisted by the Rev. W. T. Elsley, Louis John Wells, chemist and druggist, Bradford, to Annie, only daughter of Mr. George Fitton, ME, Nan Tan, Wortley.

Deaths.

BINDSCHEIDLER—The death is reported, at Basle, of Dr. Robert Bindscheidler, manufacturing chemist. He was born at Winterthur in 1844, and settled as a chemist in Basle, where he soon took a leading place in chemical industry, and became proprietor of a chemical-factory there, amassing a large fortune. It will be remembered that the Höchst Colour-works brought an action against him some time ago (C. & D., February 17, 1900) for frand in connection with the Antipyrin Convention. He was found guilty, and sentenced to eighteen months' imprisonment.

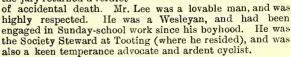
DOBLE.—On August 12, at Chelsea, Mr. Thomas Iago Doble, chemist and druggist. Aged 68.

HALLIWELL.—At Doncaster, on August 25, Mr. Joseph Halliwell, chemist and drnggist. Aged 38.

HOWARD.—On August 27, at "Danesfield," St. Albans, Robert Llewelyn Howard, of Gainsville, Georgia, U.S.A., eldest son of Robert Luke Howard, Esq., of St. Albans, in his 39th year.

LEE.—At Battersea, on August 21, as the result of an accident, Mr. Joseph William Lee, manager to the Frame Food Company. Aged 48. The deceased gentleman was a Yorkshireman by birth, and lived in Dewsbury until thirteen years ago, when

he was appointed manager of the Frame Food Company, and he took up the work of the position with great heartiness, his belief in Frame Food amounting almost to an article of faith. On Wednesday afternoon of last week, while standing on a temporary platform, consist-ing of two planks, looking through a spy-hole of a new piece of jelly-making machinery, he fell to the concrete floor. and fractured his skull. Death took place two hours later from concussion of the An inquest was brain. held on August 26, when the jury returned a verdict



SPILL.—At Totterdown, Bristol, on August 23, Mr. Tbomas Spill, chemist and druggist. Aged 73. Mr. Spill was found dead in bed, and an inquest was held at Bedminster on August 24, when Dr. Alexander Carr said a post-mortem examination revealed rupture of the valves of the heart.



Scientific Progress.

Cinchona-assay.—Van Ketel recommends the following method for the estimation of the alkaloids in cinchona-bark: Four grammes of the powdered bark is mixed with 2 grammes of powdered lime and 5 c.c. of solution of ammonia, and boiled on a water-bath under a reflux condenser for half an hour with 100 c.c. of ether. The solution is then filtered, and the insoluble matter washed with 80 c.c. of ether, and the filtrate shaken well with 10 c.c. of 10-per-cent. hydrochloric acid. The acid liquid is separated, and the ethereal solution well washed with water, which is added to the acid. The acid solution is then shaken with excess of solution of caustic soda and ether; the extraction with ether is repeated, the ether evaporated, and the alkaloids weighed. The alkaloids left on evaporating the ether may also be titrated.

The Chemistry of Waxes.—Grerhoff and Sack (Chem. Zeit., 1901, 177) give an account of the properties and composition of several of the little known waxes. Pisang wax is a semicrystalline body of sp. gr. 0.963–0.970 at 15°, melting at 79°–81°. It is but slightly soluhle in holing alcohol, but easily so in hot temperature. It contains only traces of free acids, but a considerable proportion of esters (its saponification value is 10.9 per cent. KOH). On hydrolysis it yields pisang-cerylic acid, C₂₁H₄₈O₂, melting at 71°, and pisang-cerylic alcohol, C₁₅H₂₈O, melting at 78°. The wax of Ficus ceriflua, or Gondang wax, as it is termed, is a brownish mass of high sp. gr. (1.015). It is very soluble in hot alcohol and in the usual organic solvents. The purified wax melts at 63°. On hydrolysis it yields ficocerylic acid, C₁₅H₂₈O₂, melting at 57°, and ficocerylic alcohol, C₁₇H₂₈O, melting at 198°.

Perbromides of the Cinchona Alkaloids.—The periodides of the cinchona alkaloids are well known, but Christensen points out (Journal de Pharmacie et de Chim., 1901, 168) that the corresponding perbromides have not hitherto been prepared in a state of purity and examined. With quinine, cinchonine, and cinchonidine the author has been able to prepare crystalline compounds, but in the case of quinine only uncrystallisable compounds were obtained. The two series of compounds differ in the manner in which the halogen behaves towards reagents. In the case of iodine the halogen behaves towards reagents. In the free state, inasmuch as it is transformed into hydriodic acid by the action of sulphurous acid or other reducing-agents. With the perbromides, on the contrary, part of the bromide behaves as if it were in some more intimate combination with the alkaloid, so that only a portion of it is converted into hydrohromic acid hy the action of reducing-agents. The alkaloid was dissolved in glacial acetic acid to which the requisite quantity of hydrobromic acid and then hromine were added. On cooling the perbromide crystallises out. The perbromides have the general formula ABr₂.2HBr.Br₂, where A is the alkaloid. When treated by reducing-agents they become ABr₂.2HBr.

Maté Leaves.—Cador, in an interesting paper on this subject (Jour. de Pharm. et de Chim., 1901, ii. 162) points out that various observers have established the fact that not only the leaves of Ilex paraguaiensis, hut also leaves of other species and even of plants not helonging to this genus, go to make up what is known as maté. Cador has examined twenty-five species histologically in order to determine differences in the structure of the leaves, and also the relative amounts of caffeine in the various portions of the leaf. Nineteen of the species belonged to the genus Ilex, two were of Villarezia, and four were of Symplocos. All these plants grow in South America, in the basin of the Rio de la Plata and its trihutaries, in the hasin of the Rio Uruguay, and in those of the Rio Paraguay, and the Rio Parana. All the ilex leaves have a bifacial structure. The upper epidermis is usually a single layer, is doubled in Ilex affinis, and partially doubled in certain varieties of I. Theezans. The cells of the mesophyll enclose corpuscles of a fatty nature and crystals of oxalate of calcium. Numerous peculiarities are noted in certain species, which enable one to differentiate hetween many of them. Such, for example, are cuticular striations on the lower epidermis, and aphero-crystals of hesperidine found in certain parts of the leaves. In the two species of Villarezia which are utilised, the cells of the lower epidermis are characterised by very thick walls, and in V. Conghonga very large isolated crystals are observed. Species of Symplocos are distinguished by the hrownish-green contents of the cells of the upper epidermis, and by the disposition of the cells annexed to the respiratory apparatus. These are so placed as to have their long axis parallel to the ostiole. Of the various reagents suggested for the histologico-chemical examination of maté, Cador prefers concentrated hydrochloric acid and a 3-percent, solution of gold chloride. By means of these reagents well-defined groups of crystals of the double chloride o

The Art of Pharmacy.



"Things to Avoid."

The tartaric expression when called up at 2 A.M. to dispense a bottle of medicine for a wretched pet dog.



This reproduction of a snapshot at the Pharmaceutical Conference in Dublin has a certain appropriateness in reference to Mr. Reynolds's sketch last week of "a thing to be avoided." The memhers of the local committee were arranging themselves in front of a camera, when a flippant young person said to another of the opposite and gentler sex, "There's the last rows of some 'air," and she snapped it—just there.

Observations and Reflections.

By XRAYSER.

Apprenticeship

has been a good deal modified during the past half-century, especially in the matter of premiums. But, as mentioned in the editorial article last week, the supply of youths entering the business does not seem to diminish. Formal indentures, I should think, have been abandoned to a considerable extent. Outdoor service is becoming more common, and the disposition to enter offices and secure some wages from the outset will before long compel the adoption of the Scotch system in England of paying something in the way of salary. The openings for sharp lads in other directions, as shown in the article referred to, have multiplied immensely of late years, but the prospects are not entirely in favour of the clerkships. It may seem fine for a youth to get admission to a bank, or an insurance office, or in a merchant's business, or with a stockbroker. If he is one of those fellows who will make his way under any circumstances this may be the best start for him. But the vast majority of clerks remain salaried clerks all their lives, and are lucky if they reach 2501. or 3001. a year The majority of apprentices to businesses, however, become masters themselves in their early manhood, and generally acquire a smaller or larger "property" which runs of itself. The income may be much the same during the greater part of life; but the difference in security and substantiality becomes very appreciable when old age comes on.

The Craft of Pharmacy

is to my mind an unfortunate and inaccurate abuse of language, and my sympathies-or, perhaps, I should say my prejudices-are entirely with Mr. Reid in the little discussion which Mr. C. C. Bell has opened with him. Not that I should be at all ashamed to be a craftsman; I am only ashamed that I am not one. If pharmacy consisted simply in making pills, tablets, capsules, and similar articles, and if its adepts were men who had devoted long and patient labour to making these beautifully, it would be entitled to be called a craft. Craft is almost the same as art; but the distinction seems to be that while a craftsman aims at utility, an artist studies beauty only The term "craft," too, I judge, is not applicable to machineminding. When work comes to be done by a machine, it may be done much better, but it is no longer a craft. Very little of the work of the pharmacist fits in with this definition. He has to know a good many things, and so far as he can make use of his knowledge to his own profit he is a professional man. So far as he gets his living by merely buying things at one price, and selling them at something higher, he is a tradesman. And so far as he makes his living by the production of articles which he himself has manufactured and finished, he is a craftsman.

The Charges

brought against those members of the Pharmaceutical Council against whom Mr. Glyn-Jones's letter was directed are three-fold. First, they have neglected to formulate a definite line of policy on an important section of the Pharmacy Act, and they consequently prosecute people under that section without clearly knowing what they are prosecuting them for. Secondly, they grab penalties and costs from outsiders for offences which some of themselves are committing; as one correspondent puts it, they have adopted one law for the members of the Council, and another for the rank and file. And, thirdly, by the brute force of a complacent majority they have prevented all discussion of l this policy, and, if it had been possible, would have prevented its exposure. So far, it can hardly be said that much indignation has been manifested, though the allegations are ugly enough.

My Friend Philosquare.

whose loyalty has always been independent of evidence or argument, says he will suspend judgment until he hears the other side; no doubt, he says, the gentlemen he has always voted for will be able to give good reasons for their conduct. This looks fair, but it is a kind of fairness which may be carried too far. Those gen-tlemen have already had half-a-dozen opportunities of explaining themselves, and have persistently refused every one of them. A last chance will offer itself when the Council meets again in October. If that is passed even Philosquare's allegiance will tremble, for he perceives that the allegations are of such a character that honourable men must either explain their policy or change it.

Mr. Paterson's Reply

justifying his assertion that "medical men get large subsidies from the Government." They take advantage of the tional hence tional benefits provided by certain universities which get subventions from the Government. The "subsidy" in this case is rather indirect, but it may be traced. As well as I can make out from the figures I am able to refer to at the moment, universities in the United Kingdom get a little over 100,000*l*. a year out of the national revenue. Of this Ireland gets a little less than 5,000%, and, the English universities being richly endowed and not needing public help, the bulk of the money goes, I imagine, to Scotland. But there is a long distance between contributions to universities and the support or semi-support of a particular class, or trade, or craft, if you choose to call it so. Even if we could bring ourselves to ask for this kind of aid, we should have to wait till the biggest rivers ran dry before we got it, so that I still take the liberty of questioning the practical utility of Mr. Paterson's advice.

King Edward

was advised to declare to his Lords and Commons that it was satisfactory "to close the first Parliament of his reign under such-and such conditions. Fortunately or unfortunately, according to the point of view, Kings Speeches have no statutory effect, or a general election would have been necessary. It was only a Session, not a Parliament, which he closed. For the mercies of that Session few of us have any cause to be thankful. The special achievements for which it is remembered are the increase of the income-tax and the duty on sugar. This latter imposition, I am told, will affect the balances of some large aëratedwater firms to the tune of four figures in sterling. Among the minor events of the Session we may reckon that our chances of getting legislation tending to the reduction of shop-hours have been extinguished, thanks to Lord Salisbury's veto, and that a serious attempt has been begun to reform the Army Medical Administration, in respect to which, however, no attention seems to have been so far directed to the unsatisfactory position of compounders.

His Majesty's Judges,

too, have done us but poor service in their past session. The Court of Appeal judgment in the White case has authorised a roundabout, but in practice a simple enough, method of evading the safeguards which the Legislature thought desirable to enact in 1868, when dangerous poisons were sold to the public. Against this the Pharmaceutical Council has ascertained that it has the questionable advantage of being able to wreak vengeance on attractive but penniless Scotch lassies who defy it, by sending them to prison. It has also been taught how to read the English of its own by-laws. Another High Court judgment has put us in a quandary by requiring us to sell the B.P. article when such a thing as mercurial ointment is asked for, though we are pretty sure it is going to injure our customer—a result for which probably the law will sill hold us responsible.

DISINFECTANTS.

Che "Sanitas" Co., Lim.

are the exclusive Manufacturers of the well-known Non-poisonous

"SANITAS" PREPARATIONS,

and their other Manufactures include

"SOLDIS," "OKOL," "CREOCIDE," "FORMITAS,"
"KINGZETT'S PATENT SULPHUR FUMICATING CANDLES,"
"SULPHUCATORS," "FORMIC SULPHUGATORS," "FORMIC
AIR PURIFIERS," "FORMIC FUMICATORS," KINGZETT'S
PATENT DRAIN TESTERS, SHEEP DIPS, WEED KILLER,
PATENT PRESERVED PEROXIDE OF HYDROGEN, INHALERS,
DISINFECTORS, FUMICATORS, BRONCHITIS KETTLES, and
other Sanitary & Disinfecting Appliances.

Full Catalogue and "How to Disinfect" Book will be sent free on application to—

THE "SANITAS" CO., Ltd., Bethnal Green, LONDON, E.







GEO. NELSON, DALE & CO., Ld.
14 DOWGATE HILL, LONDON, E.C.



PATENTS, DESIGNS, AND TRADE MARKS.

Searches effected through the Classified Volumes of the Society at reasonable charges. Registrations throughout the world. Advice as to infringements preliminary to litigation.

TRADE MARK PROTECTION SOCIETY, 322 HIGH HOLBORN, W.C.

Williams.

IDEAL TONIC

Fletcher, Fletcher & Ct. London & Sydney,

Editorial Comments.

The Pharmaceutical Preliminary.

THE apprenticeship difficulty to which we referred last week is generally regarded, especially in Scotland, to be directly connected with the extended scope of the Preliminary examination. There is no direct evidence to support the belief, but it is not unfair to assume that there are grounds for it. In well-informed quarters there are grave doubts as to the wisdom of the extremely radical change which the Pharmaceutical Society, at the solicitation of the Council, supported by the Boards of Examiners, sanctioned by passing the by-law that came into force after July, 1900. It may be remembered that until then the old examination remained in subjects practically what it was before the Pharmacy Act, 1868, was passed. A fair, but not extensive, knowledge of arithmetic, English, and Latin was required. The examination-papers were more searching in the nineties than in the seventies, and that was the extent to which some of the official authorities considered that the Society might legally go. The College of Preceptors set the questions and adjudicated the candidates' replies, but the control of the examination and endorsement of the College's awards were retained as the law required by the Boards of Examiners. A better test of educational fitness was long advocated outside the Council and the Boards, but these bodies were dubious about the legality of requiring anything more than is authorised by the 1868 Act-viz., such sorts of qualification as were then in force for registration as an assistant. Experience had, however, shown the Acts and Charter to be so elastic, and to contain so many undreamt-of possibilities, that at last the Council and Boards tackled the Preliminary examination, and made astounding changes. First, they added mathematics and one of two modern languages; and, second, they ceased to conduct the examination as a Society affair, and, like the General Medical Council, which is not an examining hody at all, recognised a set of examinations. Dr. Thomas Stevenson has informed the Government Department, which he represents at the Society's examinations, that this is "a salutary advance in the education of candidates for the Society's membership."

The immediate effects of the changes may be briefly stated:—

(1) By the abolition of the Society's share in conducting it, the individuality of the Preliminary examination was wiped out, and that was bound to remain, as long as it existed, an indication to pharmaceutical aspirants that

pharmacy is able to look after the education of its own youngsters.

(2) The recognised examinations are scholastic, and are in most cases the same as those for higher professional callings, consequently candidates learn that it is as difficult to get into pharmacy as into medicine or law.

(3) The examinations are so much more stringent in the three old subjects that the alteration as regards these, not to mention the addition of mathematics and the modern language, was sufficient in itself.

(4) The scholastic nature of the recognised examinations predicates that more candidates than formerly will get their certificates before entering upon their apprenticeship, and there will be little hope of those who enter without the certificates ever getting them after.

Each of these effects has its detriments to the calling of pharmacy, although we think that the change is good to the cause of general education. The abolitionists of the old Preliminary acted on sound principles when they declared that it is not the function of a technical body such as the Pharmaceutical Society to examine in general education, but, unfortunately, the fact was overlooked that the Pharmaceutical Society is directed by the Charter and Acts to do this very thing, and there was the experience of years to show that the requisite academic assistance can be got cheap. We happen to be a weak body in the professional sense-weaker, perhaps, than the veterinary profession-and it is notorious that the Royal College of Veterinary Surgeons' requirement of a few years ago that all veterinary students should pass an examination recognised by the General Medical Council has had a most disastrous effect upon that profession, for less than half the number of students now attend the teaching colleges. There can be little doubt about a similar state happening in pharmacy. What do we actually find? In January of this year Preliminary certificates were accepted by the pharmaceutical examiners from 16 persons, in April from 17, and in July from 7, altogether 40 this year so far, and if we allow 20 for October we shall have a grand total of 60, as compared with outside certificates accepted from 194 persons in 1900, besides the 1,023 persons who passed the Society's own examination. Last year the Preliminary examination and registration fees brought the Society a revenue of 4,050l.; this year, so far, 84% is the net amount received. We are not surprised to hear that some Councillors are alarmed; they anticipated a loss from re-examination-fees of perhaps 1,000l. a year, and that was all. Now that the loss is felt to be at least 2,500l. a year (the 1900 figure was exceptionally large) the enormity of the change is coming home to those who made it; it touches a tender spot. Will the leeway ever be made up, and certificated apprentices ever reach the old figures? Some optimistic prophets answer in the affirmative. We wish we could range ourselves on their side, for the alternative is one of the most deplorable things that could happen to pharmacy—a stupendous increase in the number of unqualified men, such an increase that in a few years it may be necessary to legislate for the recognition of these men. It must not be forgotten that we started the new Preliminary régime with a residue of 1,135 plucked candidates from 1900 alone, and since then hundreds have come into the trade, but only forty have registered as apprentices. The forlorn hope is that many are qualified to register, but do not and will not until they wish to enter for the Minor. That suggestion cannot be confuted at present, and it is the only thing that justifies the Pharmaceutical Council in delaying an inquiry for the purpose of considering the advisability of modifying the new regulations. Nevertheless, the possibility of the institution within our ranks of a new class of unqualified persons must be faced, and it is

eminently desirable that some statistics in respect to apprentices who have entered the trade recently should be obtained. We shall be obliged to subscribers in Great Britain who have taken apprentices this year if they would inform us by postcard of the fact, stating whether or not the apprentices have passed the examinations which would entitle them to registration. We invite a free response to this request, as the results are likely to afford good assistance to pharmacy generally.

Industrial Diseases.

A SECTION of the British Medical Association which recently met at Cheltenham was devoted to a discussion on the diseases of occupation, from which we gather some instructive points. It was noted, for instance, that whereas the symptoms produced in workers making or using solid potassium cyanide are very striking, the use of hot and strong solutions of the same salt in industrial processes is almost innecuous. The ill-effects on workers with potassium bichromate are limited to the septum of the nose, there being no evidence that the dust inhaled reaches the lurgs. Neuritis is never present in workers with arsenic or emeraldgreen, those poisons producing mainly cutaneous lesions. The typical symptoms of mercurial poisoning are found in thermometer-workers, but in furriers who use mercuric nitrate salivation is rare. There is no adequate explanation of why phosphorism is confined to local lesions of the maxillary bones, and the comparative rarity of anthrax and tetanus in workers who manipulate hides or jute is astonishing when one comes to examine the dust from the hides and bales of jute. In leadpoisoning saturnine palsy is essentially an affection of the male sex, while headache, anæmia, and encephalopathy are more common in the female sex. Dr. Murray, Birmingham, called attention to chronic brass-poisoning and to the difference of opinion as to which constituent in brass is the cause of the poisoning. Some authorities blame copper, others the zinc, whilst it has been suggested that arsenic and lead as impurities cause all the trouble. Dr. Murray ir clines to the belief that the copper is the offending ingredient, and mentions that phosphorus, either as pil. phosphori, B.P., or ac. phosph. dil., exercises a remarkable curative effect in brassworkers affected from this form of poisoning. Glass-cutting involves three principal processes -(1) roughing, by the use of the iron wheel and sand; (2) cutting, by the stone wheel, assisted by a constant flow of water; (3) polishing, by the wooden wheel, which is turned or trimmed to the section of the groove to be polished. This wheel is assisted by a mixture of pumice-powder (13), rottenstone (1), and water (enough to form a paste). So far in the process the workers do not experience any illeffects; but to get additional lustre and brightness a mixture of lead and tin is used. A good putty-mixture consists of lead, 112 lbs.; tin, 25 lbs.; antimony, 3 lbs.; bismuth, 2 oz. to 3 oz. The metals are melted together, and the scum which forms is removed, the latter being powdered and sifted and used on the wooden revolving wheel. Very fine work needs the use of bristle brushes, which revolve at the rate of 2,000 revolutions a minute, these conditions sufficiently explaining the prevalence of lead-poisoning amongst the polishers. Substitutes for puttymixture have been suggested in rouge and oxide of tin, but the polish they give is not lasting. Hydrofluoric acid, with a small quantity of sulphuric acid added, is a newer method which appears likely to rival putty-polished glass, as lightly cut and engraved glass polished by the acid-method comes out bright and clear. C

Dr. Alexander Scott, Glasgow, called attention to the necessity of giving more importance to the temperament and general health of those engaged on railways. Neurosis of railway servants is an alarming phase of this dangerous occupation, the majority of accidents heing due to the nervous tension which few men are constituted to withstand. Sir Samnel Wilks is usually credited with the discovery of phosphorus-necrosis in this country. Phosphorus-necrosis occurs in the manufacture of yellow phosphorus, phosphor-bronze, and phosphorus vermin-killer, as well as in match-making. In the English or paraffin-dipped match the dangerous parts of the processes of manufacture are the mixing of the paste, the dipping, drying, and hoxing. The dipping-paste is a mixture of glue, potassium chlorate, red-lead, powdered glass, and yellow phosphorus, with a sufficiency of water. This composition is spread on a heated slah, and the wooden splints mounted in a frame, are coated on both ends by pressing into the paste. The moist heated paste gives off phosphorus oxide P4O6, and frequently when cutting and hoxing the matches fire when phosphoric oxide is again evolved. Mr. W. F. Dearden, who read the paper on match-making, said that phosphorus-necrosis of the jaw only occurs in persons possessed of carions teeth, or having the jawhone exposed through an extraction. It is not difficult to see that the oxides of phosphorns mixing with the saliva would he hrought directly in contact with exposed hone surfaces and easily account for the resulting necrosis. The radical methods of preventing phosphorus-necrosis consist in the total prohibition of the use of yellow phosphorus, the fixing of a prohibitive duty on the strike-anywhere variety of matches, or the establishment of a Government monopoly in the manufacture. The hygienic methods are the use of fans to draw away the vapours of phosphorus, the inspection of the teeth at intervals hy a dentist, and the saturation of the air with turpentine-vapour. In connection with the plumbism of painters, Dr. Greaves, Derhy, mentioned that it is a fallacy to suppose that lemonade is a preventive of lead-poisoning. The impression arose from calling a drink containing dilute sulphuric acid lemonade, whereas real lemonade in which citric acid is used forms citrate of lead instead of snlphate of lead yielded with the sulphuric-acid drink. Lead citrate being a fairly soluble salt only makes matters worse.

Poisons in Ceylon.

THE Legislative Council of Ceylon on August 2 considered and passed an Ordinance to regulate the sale of poisons. The Ordinance empowers the Government Agent of each province to issue to persons whom he may consider of sufficient skill a licence to sell poisons hy wholesale or retail, with power to revoke the same. The fee for the licence is to he 5r. a year, and it is further provided that any person selling, exposing, or offering for sale poison contrary to the provisions of the Ordinance, or who shall fail to conform with any regulations as to the possessing, keeping, or selling of poisons made in pursuance of it, shall be guilty of an offence, and liable on conviction to a fine not exceeding 500r., or, in default of payment, to imprisonment for a period not exceeding six months. P wer is given to the Governor, with the advice of the Executive Council, to make, revoke, or vary regulations as embodied under the following:-

These provisions are in some respects quite novel to British poison-law, but it will he observed that they are permissive, and it does not follow that they will he enforced in their entirety. The poisons-schedule attached to the Ordinance was in the draft divided into Part 1 and Part 2, but owing to the above-quoted powers this distinction was omitted, so that the Governor will decide by regulations which poisons shall he sold under the more strict method. It is to be hoped that the Governor will, under Suh-section (g), make adequate regulations for the examination of applicants for the licence, so as to ensure that their knowledge is sufficient to justify the granting of the licence; and it would he of advantage if the British pharmacists in business in Ceylon were represented on the Advisory or Examination Board, either in respect to the regulations generally or to the examination of applicants for the licence.

HYDROCYANIC FUMIGATION.

The use of hydrocyanic-acid gas for destroying insects on fruit-trees has been mentioned in the C. & D., but the use of the gas for fumigating granaries filled with grain will be new to many of our readers. Many of the large flour-mills and granaries are treated with hydrocyanic-acid gas for the destruction of insect-pests without removing the grain stored in the huildings. The Maryland experiment-station have investigated the matter, with a view to finding out whether the seeds subjected to the process are impaired in germinating-capacity. It is found that if 1 cubic foot of the seeds is exposed to the gas from 1/3 gramme of potassium cyanide the seeds retain their vitality for twelve months. Damp grain is more sensitive to the influence of hydrocyanic acid than dry grain. It is also noted that whereas dry grain, treated with the acid for several days at a time, is not injured as food, damp grain, if exposed for only a short time, should not he used as food until several hours after removal from the gas. The experiments were conducted on mice. The hydrocyanic acid used in the grain-fumigating process is generated by the action of sulphuric acid on potassium cyanide, and of course great precautions are necessary to avoid accidental inhalation of the gas by the operator.

^{1.} The regulations may provide, amongst other things—

⁽a) For regulating the possession of poisons;
(b) For regulating the sale of poisons;

⁽c) For fixing the quantities of poison which wholesale or retail dealers or other persons may respectively keep

⁽d) For describing or subjecting to conditions the possession and sale of poisons in any shop or place where articles of food are sold or exposed for sale;

⁽e) For prescribing the marks which wholesale or 'retail dealers shall insert on vessels or cases containing poison in the ordinary

course of wholesale or retail dealing.

(f) For prescribing the books to be kept and entries to be made therein by wholesale or retail dealers when dealing wholesale or retail with poisons;

⁽g) For prescribing the form of licence to be issued by the Government Agent and the conditions to be attached thereto;
(h) For exampling from the properties of any regulation such

⁽h) For exempting from the operation of any regulation such persons or classes of persons as may seem expedient;
(i) For every other purpose which may be deemed necessary for controlling and regulating the possession and sale of poisons.

^{2.} Provided always that nothing herein contained shall in any way restrict, or be construed to restrict, the generality of the powers conferred on the Governor by the last preceding section, but such powers shall extend to all matters, whether similar or not to those in this section mentioned, as to which it may be expedient to make regulations for the better carrying into effect

of the objects of this Ordinance.

3. The regulations when so made shall be published in two consecutive issues of the Government Gazette in the English, Sinhalese, and Tamil languages, and shall be laid before the Legislative Council, if then in session, and, if not then in session, then so soon as possible after the commencement of the next ensuing Session, and, if within forty days after their heing so laid before the Legislative Council any of such regulations be objected to by the Legislative Council, the said Council may by resolution amend or annul any such regulations. All such regulations so amended and such regulations as shall not be amended or annulled, shall he proclaimed in two successive issues of the Government Gazette in the English, Sinhalese, and Tamil languages, and shall come into force upon such proclamation in the Government Gazette and shall thereupon he as legal, valid, and binding as if the same had heen enacted in this Ordinance.

AUTUMN PESTS.

Harvest-bugs are again sending many customers to chemists for a simple preventive or curative application for the bites. The insect which does the mischief is variously stated to be the Trombidium holosericum and Trombidium autumnale, but the effects of the bites are the same. The attacks of the insects are generally confined to the ankles and legs, and the effects are particularly severe in the case of women and children. The application of a drop of strong ammonia neutralises the effect if applied at once, and spirit of camphor is the best after-treatment. As a preventive an essential oil, like cajuput, citronella, or eucalyptus, is effective. Mosquitoes and gnats are also plentiful in some districts this year, and cause considerable suffering in those unfortunate individuals who are extra-susceptible to their bites. The treatment mentioned above as curative and preventive of the bites of harvest-bugs applies equally well in cases of bites from gnats and mosquitoes. It should be noted that as the insects only become lively in the late afternoon and evening, that is the particular time when preventive measures should be adopted.

SANATORIA FOR CONSUMPTIVES.

Sir James Crichton Browne made an eloquent appeal for the establishment of sanatoria or special hospitals for the cure of tuberculosis at the British Congress on Tuberculosis. The pathological and clinical evidences of the curability of consumption are convincing, and the medical profession are agreed that the sanatoria-treatment is the best method available at present. It behoves us, therefore, Sir James said, to place that treatment within the reach of all affected persons. The same treatment should be adopted in the case of scrofulous children—much misery would be relieved, and the amount of weak-mindedness in the next generation much reduced. The following case was cited as an instance, with the object of bringing the matter more vividly to the audience than a general statement:—

I read in the newspapers only a few days ago the sad story of an inquest on a poor cripple, Leonard Paris, who at 19 years of age found what he called "his lonely, miserable existence" unendurable, and so threw aside his crutch and handled the revolver. From six years old he had suffered from hip-joint disease, and although he had been liberally supported by his friends, and had had the benefit of treatment in several hospitals, he remained unrelieved, for for four months before his death his temperature was feverish. But although his body wasted, his intellect remained vigorous and clear, as the pathetic letters he left behind him prove, while his sense of deprivation became more and more acute. Hope died within him; at last he wrote: "This time I mean to succeed; better a few moments of pain than an unbearable existence, chained by my merciless, hideous fetters to a disease which I know in my inmost heart to be incurable." The case of Leonard Paris appeals to me with peculiar force, because the most brilliantly intellectual youth whom it has ever been my lot to meet, whose Oxford associates predicted for him a triumphant career, when stricken down by a recurrence of tuberculous hip-joint disease, also put out the light with his own hands. Had he and Leonard Paris had the benefit of sanatorial treatment at the outset of their malady, there is reason to believe that the tragic issue would have been avoided.

METHYLATED-SPIRIT DRINKING.

That irrepressible Dublin medico-pharmacist, Dr. J. C. McWalter, B.A., D.P.H., read a paper to the Royal Institute of Public Health at Eastbourne on this subject. In the conrse of it he told the Congress about the physiological effects of each constituent of the spirit, stating that the wood-naphtha appears to be responsible for certain results, which make methylated spirit the favourite drink with a class of persons who could afford the more orthodox stimulants, and that the mineral oil (erroneously stated to be in the proportion of 2 per cent) undoubtedly acts as a poisonons stimulant to the cerebro-spinal system, and is, in fact, capable of producing a special kind of intoxication. Of the better-known alcoholic compounds, none seems so similar in its effects to methylated spirit as absinthe, for it

is the essential oils in the latter that produce the characteristic effects, just as the wood-naphtha is responsible for the peculiar action of methylated spirit-viz., a peculiar mental exaltation, accompanied by a wakefulness and a capacity for work of an intellectual character, very different from the drowsiness following an ordinary debauch. The methylated-spirit drinker seems to develop peculiar talent for lying. There is a brilliancy and a cogency about his excuses, and an unanswerable logic about his explanations, which bear witness to the stimulating effects of the spirit on his intellectual powers. Dr. McWalter, having reviewed the undoubted evils which attend methylated-spirit drinking, suggested that the spirit might be made undrinkable by adding a proportion of naphthalin, which is now largely used as a disinfectant, and is not dangerously poisonous, nor would it interfere with the legitimate use of the spirit for polishing, preserving, &c. He also advocated that it should, like ether in Ireland, be put on the schedule of poisons. The sale would then be confined to chemists, and as the article would be boldly labelled "Poison," it would require an individual of more than common courage to drink it. The responsibility of retailing it only to proper persons would then lie with the chemist, who would be amenable to prosecution unless he exercised more discretion in selling it.

WASPS.

These creatures are very prevalent this year in country districts, and some shopkeepers have to keep boys doing nothing else than killing the pests. Another remedy is suggested by Mr. John Gibson, F.C.S., Hexham, who, writing to a Newcastle paper, says: "The best way to destroy them is to make a solution of cyanide of potassinm, say, $\frac{1}{2}$ to 1 oz., in $\frac{1}{2}$ pint of water, and to soak a piece of cotton-wool or rag in this and insert it inside the hole of a wasp's nest at night, when they are all in. It is most certain in its action." Undoubtedly; but the trouble with most people is to locate the origin of the pests, and to approach the lair once the buzzer has been tracked to it.

A NEW SOURCE OF POTASH.

It is well-known to chemists that sheeps' wool contains a considerable proportion of potash salts, which is washed out in the process of cleaning preparatory to carding and spinning. Much of the potash salts is found in the resulting suint or Yorkshire grease, but most of it goes to waste in the wash-waters, and little or no attempt has been made in England to save it. On the Continent greater attention has been paid to the matter, and we understand that as much as 2,250,000 lbs. of wool-potash is produced annually by several wool-washing works. This contains from 75 to 90 per cent. of potash carbonate and some soda. It finds a ready sale. As Great Britain is the most important centre of the wool spinning and wearing industry, it is obviously desirable that the waste which goes on here should be averted; and Mr. W. R. B. Lockie, of Liverpool, is now trying to initiate reform by introducing here a wool-washing machine, which saves the potash as well as the wool-fat. The machine is largely used on the Continent, and consists essentially of a battery of spray-washers, which enables the wash-water to pass from one wool compartment to another, as in repercolation. The wool is impregnated successively with liquids that lose in alkaline properties as they gain in heat, until the wool reaches the temperature of the first washing-bath. Some sorts of wool yield more carbonate of potash than others-for instance, Australian wool yields about 160 grammes and fine qualities of Buenos Ayres wool yield as high as 190 grammes of carbonate of potash per kilogramme of combed wool. The capacity of the machine per day of ten hours varies between 141 to 318 cubic feet of greasy matter at a density of 12° Baumé, according to the kind of wool treated and the capacity of the washing-tnb.

Every 35.36 cubic feet yield about 172 lbs. of wool-potash selling on the Continent at about 12s. 6d. per cwt.

DANGER OF GELATIN-INJECTIONS.

The new method of treating aortic aneurism by subcutaneous injection of solution of gelatin has had an unhappy result at Guy's Hospital. There a carman of 37 was being treated by the method, and had received six or seven injections, each of from 5 to 6 oz., when he suddenly developed symptoms of tetanus, and died on August 21. Unfortunately, an engineer's labourer of 33 also died after ten injections. Dr. Lewis Stamm, the house physician, told the Ooroner at the inquest that he had made the solution himself so that he might be sure that it was quite sterile, but the post-mortem showed that some impure organism had got into it, from which both men died. Although the doctor was exonerated from all blame after full public inquiry, we must conclude that the treatment is open to a serious objection. The gelatin solution was sterilised for three days, and was prepared in 200 c.c. quantities. Considering that gelatin solution is used in a similar manner for other purposes, it is eminently desirable that further information should be published, and we shall be glad to hear from any dispensers who have experience in the matter.

SPECIMENS IMPORTED IN ALCOHOL:

Mr. F. E. Beddard, F.R.S., of the Zoological Society, has a grievance against the Costoms Department. Major Alcock, Superintendent of the Indian Museum, Calcutta, sent to him for study and description some marine crustaceans collected by him during the voyage of the Royal Indian Marine Survey ship Investigator. The specimens were preserved in alcohol, and the revenue officers claimed duty on it to the extent of 25s. Declining to pay, Mr. Beddard had nearly all the spirit poured away in the presence of an official, the net result being, he says, "that a Government Department in England fines a Government Department in India for sending spirit which is dutiable, but which that Department can purchase as if it were not dutiable." It does look as if the tape were red; but we are not aware of any part of the law which authorises the Customs officers to make an exemption in favour of a Government Department, so far as importation of alcohol is concerned. In this case Mr. Beddard was really the importer, and Major Alcock should have known better than to export his crnstaceans in dutiable spirit. There are other preservatives which would have done just as well.

JAPAN IN FORMOSA.

Some interesting facts concerning Japanese policy in Formosa, and the changes which have taken place in the camphor and opium trade, are given by a correspondent in a recent issue of the Hong-Kong Weekly Press. Formosa under Chinese control, although never worked as it might have been, was always a profitable possession, but nnder Japan there has been an annual deficiency of \$300,000 to \$700,000. The Government has now called into existence the Bank of Formosa, and its avowed purpose is to exploit the island, develop trade, and encourage industry. How they are progressing in Formosa is shown by the fact that, up to the present, 300 bandits have been killed, 350 houses burned, and thirty-five settlers shot. With regard to the camphor-industry, the correspondent states that the foreign houses who controlled the output previous to the monopoly had established distilling-plants at convenient points, which represented to them a charge on capital account amounting to about 50,000l. While not pretending to have a redressible grievance when the Government took over the camphor. industry, which would entitle them to anything for the loss of goodwill, the merchants felt that they had vested rights in the plants which were tangible, and ought not to be

ignored. Recognition has not yet come, however, and more than half the foreign firms have moved away. Under the Chinese Government opium was farmed out, and the conditions now governing the industry are exactly the same as they were. Its importation is restricted to northern ports, as are the exports of camphor, and an effort is being made to control its use by licence. About 140,000 persons have paid fees to the Government for the purpose of smoking it, being 5.29 per cent, of the population.

PHOSPHATE FERTILISERS.

The consumption of various forms of phosphate fertilisers in agriculture is still on the increase, Germany being ahead with an annual consumption of 895,500 tons. In Great Britain 128,000 tons was used in 1899. Germany had an output in the same year of over one million tons, chiefly as a by-product in the manufacture of steel by the Thomas Gilchrist process. Great Britain's output was 237,000 tons. The quantity of phosphoric acid thus applied to the soil in 1899-1900 is calculated to have amounted to the following millions of kilogrammes :-

	Basic Slag.	Mineral Super- phosphate.	Other Phos- phatic Fertilisers.	Total.	
Germany France Great Britain Austria-Hungary	143·3 25·5 17·9 16·5	121·2 147·0 75·2 28·8	31·0 57·0 ·4·5 9·0	295·5 229·5 97·6 54·4	

Some of the smaller countries use phosphatic fertilisers most freely, for if the quantity of phosphoric acid applied in 1899-1900 be calculated in kilogrammes per hectare of cultivated land Be'gium is an easy first. During the last decade of the nineteenth century the production and application to the soil of phosphates of all kinds has more than doubled in European countries.

Mew Books.

Any book named in this list can be supplied post-free to any part of the world on receipt of the published price by the Publisher of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Hall, W. S. Manual of the Japanese Laws and Rules relating to Patents and Trade-marks. 8vo. 2s. net. (Low.)

Harrington, C. Manual of Practical Hygiene. 12 Plates. 105 Engr. Roy. 8vo. Pp. 736. 21s. net. (Kimpton.)

Leffmann, H., and Beam, W. Select Method in Food. analysis. 8vo. 11s. net. (Rebman.)

Ramsay, W., Travers, M. W. Argon, and its Companions. Phil. Trans, A. Vol. 197. Pp. 47-99. 3s. (Dulau.)

Scheele, C. W. Chemical Essays. Trans. from the Transactions of the Academy of Sciences at Stockholm. With Sketch of Life of Scheele by John Geddes McIntosh. 8\frac{3}{4} \times 5\frac{1}{2}. Pp. 324. 5s. net. (Scott & Greenwood.)

NATAL DRUG-IMPORTS.—From a recent issue of the Natal Government Gazette we gather that during the six months ended June 30, 1901, and 1900 respectively, the imports into the colony included the following:—Apothecary ware, 28,994; acetic acid, 368 gals. (921); medicinal preparations, 31,5821.; drugs (free), 8,0901—the total combined related to the combin bined value of the aforesaid articles in the six months of bined value of the aloresald articles in the six months of 1900 was 52.291*l*.—extracts and essences. 15,388*l*.; perfumery, 5,116*l*. and 3,496*l*.; photo ware, 7,938*l*.; saccharin, 1,086*l*.; saltpetre, 137 cwt. (137*l*.), 56 cwt. (56*l*.); sheep-dip, 4.211*l*., 1,126*l*.; toilet soap, 4.540*l*.; soap, other than toilet, 4,775,866 lbs. (40,064*l*.), 2,230,343 lbs. (16,053*l*.); perfumed spirits, 1,351 gals. (2,989*l*.), 1,953 gals. (1,664*l*.); spirit of wine 41 cals. (70*l*.) 18 cals. (11) wine, 41 gals. (70l), 18 gals. (11l.).

A Mew Adulterant of Bergamot Oil.

By Dr. SALVATORE GULLI.

THE adulteration of commercial bergamot oil by means of turpentine, either crude or rectified, as well as by the bergamot distillate, or by isomeric peel essences, has almost ceased. Indeed, these adulterants so modify the physical and chemical constants—the optical rotation, but especially the normal ester-content—that they are easily detected. New falsifications, however, are at present largely used, particularly in intermediary commercial markets. As the value of bergamot oil is judged by the ester amount a new method of falsifying the results has recently been introduced-viz., the addition of turpentine oil which has been saturated with a current of hydrochloric-acid gas. By this treatment turpentine oil acquires an acid number corresponding to 18 to 20 per cent., if estimated as in the process for linalyl acetate. The chloro-derivative thus obtained may be a liquid mono-hydrochloride of terebinthin (C₁₀H₁₆HCl) or the bihydrochloride (C₁₀H₁₆2HCl). This chloro-derivative is decomposed during the process of saponification of the oil with alcoholic potash-solution, and is, of course, reckoned as linalyl acetate should proper precautions not be taken. The turpentine so treated can be added to bergamot oil in the proportion of 5 to 10 per cent. without much altering the physical and chemical constants, whilst it hardly lowers the ester-content in the proportion of 1 to 2 per cent. We have found this adulteration in some samples of commercial bergamot oil even in the proportion of 10 per cent., as the following results show:-

	Gr. Cr. Opt. Rot.		Saponi	Ester-	
Oils	Sp. Gr. at + 15° C.	at+20° in 2 cm. tube Substance KOH Consumed		KOH Consumed	content per cent.
1 2 3	0·882 0·8817 0·8810	+10·50 + 8° + 6°	2·130 2·315 2·787	0·2213 0·2451 0·2910	36·05 36·75 36·40

It will be seen from these figures that the three samples of commercial bergamot oil have their sp. gr. and optical rotation nearly normal, and they contain an almost normal linalyl-acetate content. Nevertheless, they were adulterated, the two first samples containing almost 5 per cent. and the third at least 10 per cent. of turpentine oil treated with hydrochloric acid. It is therefore advisable to be on one's guard against this new adulteration, which can be ascertained neither by means of physical and chemical constants nor by saponification. Instead of saponification fractional distillation may be employed, but we find the following to be the best plan. Several grammes of the suspected bergamot oil is boiled with alcoholic potashsolution in a platinum dish until the whole of the liquid is evaporated; then calcine the residue so as to get rid of organic matter, and treat it with distilled water and filter. The usual test with nitrate of silver will show pressure of hydrochloric acid.

Reggio Calabria, August 18.

[In their last report Messrs. Schimmel & Co. say: "This year's bergamot oil has a low ester-content; the average may be taken as from 34 to 35 per cent. Moreover, whilst the oils manufactured in the 1899 season had not only a very high ester-content, but also an exceptionally high sp. gr. (0.883 to 0.888), the oils of 1900 have, with a low ester-content, also a very low sp. gr., which only very rarely exceeds 0.880." These remarks may be considered along with Dr. Gulli's interesting observations.—EDITOR C. & D.]

Trade=Marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost Il., obtainable through any money-order office.

(From the "Trade-marks Journal," August 14, 1901.)

- "PILEMAS" (no claim for "Pile"); for a pile-suppository. By
 J. E. George, 71 High Street, Hirwain, Aberdare, Glamcrganshire. 238,514.

 "SANCHIEF"; for a medicated handkerchief. By Southall
 Brothers & Barclay (Limited), Birmingham. 239,606.
- AESIAB" (no claim for "Easy"); for chemicals. By Ada Louisa Twining, St. Clare Cottage, Fredericton, New Brunswick. 239,904.
- Design and signature; for surgical bandages. By Vincent Wood, 4 Albion Place, Blackfriars Bridge, S.E. 228,377.
- "Morganite"; for all goods in Class 16. By the Morgan Crucible Company (Limited), Battersea. 239,040.
- RIL"; for foodstuffs. By Bovril (Limited), Old Street, E.C. 239,343.
- "DYNAMINE" and "MOTORINE" (no claim for "Dynamo"); for lubricating-oils. By Price's Patent Candle Company (Limited), 31 Threadneedle Street, E.C. 238,541 and 236.542.
- 'PING-PONG"; for soaps. By R. Wheen & Sons (Limited), Deptford Creek, S.E. 238,965 and 238,966.
- "Solene; for lubricants. By Snowdon, Sons & Co. (Limited), Westferry Road, Millwall, E. 239,251.
- "IDYLLENE"; for soaps, detergents, oils, &c. By Vinolia Company (Limited), Malden Crescent, N.W. 239,590.

(From the "Trade-marks Journal," August 21, 1901.)

- "VIOLETINE" (no claim for "Violet"); for a synthetical chemical composition. By Max Philipon, 7 Savage Gardens, Crutched Friars, E.C. 239,058.
- rpax"; for chemicals. By J. J. Griffia & Sons (Limited), 20 Sardinia Street, W.C. 239,551. "Hypax"; for chemicals.
- "TUMPY"; for a coal-economiser and smoke-preventer (powder). By J. Hulme & Co., 47 Seel Street, Liverpool. 239,595.
- "NUGGET"; for a veterinary ointment. By J. Francis, Orchard
- House, Wincanton. 239,101.

 "Auronal" (no claim for "Auro" or "Aurone"); for a chemical antiseptic. By the Chemische Fabriken vorm. Weiler-ter
- Meer, Uerdingen on the Rhine, Prussia 236,395.
 "LARPENE"; for a medicated sweetmeat and a medicated syrup. By H. Oppenheim and C. E. Buss, 140 Old Kent Road, S.E. 233,039.
- SEMACEA" (no claim for "Derma") and "Ec-cea"; for goods in Class 3. By Walter Duplock, 33 High Street, Marlow, Bucks. 239,246 and 239,247. "DERMACEA"
- "Vigorone" (no claim for "Vigoro"); for goods in Classes 3 and 42. By E. T. Pearson, 93 Neuerwall, Hamburg. 239,395 and 239,396.
- "Medicopin" (no claim for "Medico") and "Ferrodin" (no claim for Ferro"); for chemicals. By the Odin Syndicate (Limited), 31 Eagle Wharf Road, London. 239,561 and 239,562.
- CELTEX"; ELTEX"; for surgical instruments and appliances. By Southall Brothers & Barclay (Limited), Birmingham. 239,899.
- "LAMPARCO"; for carbonic paper. By the Lamson Paragon Supply Company (Limited), Canning Town, E. 239,459.
- "VimLac"; for a milk-food preparation. By H. P. Easto, 3 Love Lane, Eastcheap, E.C. 238,721.
 "Casoid"; for food and biscuits. By Callard, Stewart & Watt (Limited), 65 Regent Street, W. 238,836.
- Design of oval label with wording; for common soap. By A. & F. Pears (Limited), 71-75 New Oxford Street, W. 238,625.
- "Snowdeine"; for lubricants. By Snowdon, Sons & Co. (Limited), Westferry Road, Millwall, E. 239,250.
- "Parlio"; for toilet-soaps. By E. Pickering, 138 London Wall, E.C. 239,159.
- "MORGANITE"; for cupels manufactured of bone-ash, or other materials covered by Class 50. By the Morgan Crucible Company (Limited), Battersea. 239,632.

The Chemists' Exhibition.

THE exhibition organised by the British and Colonial Druggist is this year being held in Covent Garden Theatre from August 26 to 30. The stalls are covered by a floor level with the stage, and the exhibition is thus held amidst quite unusual surroundings. The exhibits are not so nnmerous as in past years, but as a rule they are tastefully presented to the visitors, the prevailing feature being soda-fonntains. In the following notes we have endeavoured to confine ourselves as much as possible to the new goods shown, and have adopted an alphabetical arrangement.

The ABBEY EFFERVESCENT SALT COMPANY (LIMITED) show a large pile of the Abbey salt. New showcards are a feature here, one for hot-weather use being inscribed in large letters, "Why count the hours? If you find it too hot to sleep, the salt of salts is all you want." The pedagogue showcard is new; the design, however, is one the public have been made familiar with through the newspapers.

The AMERICAN TOILET COMPANY are showing a complete line of the toilet-soaps made by Messrs. A. Jergens Company, Cincinnati. The factory in which the soaps are made is claimed to be the largest in the world, and occupies an area of eighteen acres. The leading lines of soap are the Anchor, Castile, the Marqnisa, and Carnation soaps, and a series of 2d. ovals.

Mr. ADOLPHE ARBENZ is showing a "patent corn-extirpator" in the form of an improved knife for chiropodæic purposes.

The AUTOMATIC SIGHT-TESTING AND OPTICAL SUPPLY COMPANY (LIMITED) exhibit spectacles and folders and the machine they supply to chemists for testing customers' eyesight.

Mr. Charles Best is exhibiting two types of American soda-fountains. These are small samples, and do not materially differ in construction from those mentioned hereinafter. The outside casing in both is marble. In front is a large double-stream soda-draught tap. Below this are aluminium syrup-taps, the syrups being stored in porcelain tanks. The ice-box surrounding the tanks has a wood and metal lining, and at the bottom corner are the coil and cylinder coolers. Hot-soda apparatus and supplies are also shown, and fruit-syrups and all fountain accessories

shown, and fruit-syrups and all fountain accessories.

The "Crown," "Imprimis," and "Monarch" cameras are being shown by Mr. T. P. BETHELL, who is also pushing the merits of the "Regal" enlarger. The latter is in two sizes—for 4 and ½ plates respectively—and the specimens of enlargement shown prove that good work can be done with this simple but ingenious and low-priced apparatus.

Mr. A. E. Bolshaw, representing Messrs. R. M. Green & Sons, Philadelphia, Pa, shows soda-water fountains. Mr. Bolshaw is a chemist in business, and claims to be the first chemist in England to successfully run a modern soda-fountain. We had an instructive talk on this subject, the long and short of it being that, in Mr. Bolshaw's opinion, the soda-fountain has come to stay, and can be made to pay, if run on certain lines. Mr. Bolshaw has prepared a booklet giving, as the result of his experience, the best way to run a fountain and compound the flavouring-syrups. The systems of sliding porcelain syrup-tanks and cooling-tubes are the features of Green's fountains.

Somatose is now put up in the liquid form, this preparation containing nearly 80 per cent. of albumin, like the powder. These, with the iron-somatose and milk-somatose, are to be seen displayed by the BRITISH SOMATOSE COMPANY (LIMITED). Somatose has gone with the s.s. Discovery on an Antarctic expedition.

The specialities of Mr. C. T. Busse, who has a small corner show, are herbs for making liqueurs. His stand is piled with square packets containing "powdered herbs," for producing imitations of various liqueurs, principally Chartreuse and Benedictine. Each packet weighs about \(\frac{1}{2} \) oz., and is said to be sufficent to produce 5 pints of liqueur.

A striking show in a favourable situation—right opposite the main entrance—is made by the CHELTINE FOODS (LINITED), where the preparations so fully described in our last week's issue (page 342) are being explained by Mr. Steele.

Messrs. T. Christy & Co. have a great variety of pharmaceutical goods on show. Amongst the newer articles may be mentioned boot-cream in collapsible tubes—a cleanly way of using boot-cream; capilets of balsam of copaiba, which look like small sugared almonds; chlorate of potash and borax lozenges, where each lozenge is of two colours, the pink side containing the chlorate of potash, the white side borax; pepsin wafer lozenges (thin lozenges of the size of a 2s. piece); and worm-chocolates. The last named are attractively put up in cylindrical transparent green, red, and violet gelatine boxes. Two methods of filling collapsible tubes are being demonstrated, and examples of ready-pnt-up preparations in this form are being exhibited.

The COLLIN'S EUCALYPTI REMEDY COMPANY exhibit bulk eucalyptus oil in tins, and various eucalyptus preparations and appliances.

The COLUMBIA OPTICAL AND CAMERA COMPANY have a new photographic paper on show. The paper used for sensitising is a kind of tinfoil-paper, giving a silvery appearance to the high lights of the finished photograph. Sensitised postcards and the "Pecto" and "Bullard" cameras are also represented.

Messrs. EDWARD COOK & Co. (LIMITED), whose soapcastles have been a feature at exhibitions for some years, this time vary the effect by displaying a large painted scene on the Riviera as a setting for their goods. There is a terrace along the front, where visitors can take tea, and by a little effort fancy themselves gazing at the real La Croisette. The object of all this is to call attention to the Riviera soap. In a showroom at the back specimens of all Cook's soaps are exhibited, including the "Throne," "Frontier," and "Cambath" soap—the last named has the property of preventing the bites of gnats and mosquitoes, so troublesome just now.

Messrs. Cosenza & Co., besides the Maggi series, have Tansan—their Japanese table-water—on view.

X-ray apparatus and specimens of x-ray work are being shown by Messrs, H. W. Cox (LIMITED) in one of the boxes.

Messrs. Cresswell Brothers & Schmitz have a splendid show of sponges, the exhibit being a corner one built up entirely of cases of sponge. The large sign-boards with the firm's name and address on are made up of sponge, and are very effective. The exhibit contains cases of every kind of Turkey cups and honeycombs—in fact, the whole show is a kind of index of the enormous stocks kept at Red Lion Square. Some new showcards for customers, gold on red and pale-blue, are attractive, as is also a new design on the cards used for carded sponge. Two copies of the Customs bill of entry are displayed, showing that in 1900 this firm directly imported two record quantities of sponges—in January 1,043 cases, and 1 305 cases in November—eloquent testimony of the extent of the business and of the fact that the firm are first-hand in their dealings.

The Crown Perfumery Company make a magnificent display of perfumes and soaps. In the centre of the exhibit is a scent-fountain, which diffuses sweetness around. Anti-catarrh salts is a new line, put up in the same kind of bottles as the well-known "Crown" lavender-salts, but with a distinctive label. The lavender-salts are now supplied in silver-topped bottles—three sizes of bottles and two styles of stoppers, plain and chased silver. The "Carnatia" series of perfinmes and soaps is one of the most popular lines. The "Carnatia" soap is packed in dainty white wrappers, embellished with tiny carnations, contrast, from a window-dressing point of view, being obtained by the "Niris" soap in Royal red and the "Vanda" soap in olive-green wrappers. New Christmas goods are also shown.

wrappers. New Christmas goods are also shown.

DAISY (LIMITED) display devises for advertising "Daisy" and "Babbs" "Babbs" is an infants' teething-powder, wrapped in triangular form and boxed in triangular containers. Among the newer advertising ideas is a blank pocket-book in crinkled-paper cover, with pencil tucked in the back, to sell at 1d.

EDGAR'S CROUP LOTION (LIMITED) have managed to make a very effective display out of unpromising material. Edgar's lotion, in its blue-and-white wrappers, is brightened and beautified by a plentiful sprinkling of multi-coloured marguerites and other cut flowers. A plentiful supply of advertising tablets and printed matter for the use of chemists is to be seen.

Messrs. Eduardo et Cie. show wines, the special ones being Dr. Hale's meat and malt and coca wines.

The ERASMIC COMPANY (LIMITED) exhibit in a tasteful manner the various Erasmic soaps and perfumes. The "Peerless" and "Elite" are the two best-known Erasmic herb-soaps, the former a deep plum-colour and the latter white. The shaving sticks, tubes, and pots, and the bathpowders, which are among the more recent introductions, were referred to recently in the C. & D.

Messrs. FARROW & JACKSON (LIMITED) exhibit mineralwater machinery and fountains. The former, adapted for using liquefied carbonic-acid gas, has been supplied to several regiments in Ireland for making soda-water for the regimental messes. It appears that Lord Roberts first suggested that soda-water could be economically made regimentally. The soda-water fountains turned out by this firm are distinctly different from American patterns, in that more wood is used in constructing them.

The GEM SUPPLIES COMPANY (LIMITED) fill their space with "Gem" stills, in which, we are informed, it is impossible to distil alcohol, so that the revenue authorities readily permit their use.

The B. F. GOODRICH COMPANY have a capital show of indiarubber goods, of which may be enumerated the Goodrich and Sprague hot-water bottles. The former bottles have eyeletholes at the bottom and loops at the top, so that they can be secured by tapes to any part of the body. The flannelcovered ones are also distinctive in having the cover attached to the rubber, which causes them to retain the heat longer than when the covers are loose. The Sprague bottle is shaped so that it can be fastened round the head to relieve neuralgia and earache. There is also shown a new kind of ring pessary, which can be reinflated by means of a hypodermic syringes when the air escapes. A specially prepared spot is selected for the puncture, which closes up as soon as the needle is withdrawn.

Messrs, John Gosnell & Co. (Limited), while keeping "Famora" and its offshoots well to the fore, do not neglect the merits of the popular "Oherry Blossom."

Messrs. Hearon, Squire & Francis (Limited) exhibit a selection of manufactured articles taken from stock intended to illustrate the perfection attained in the several departments of their business. The firm now turn out all kinds of compressed tablets, capsules, and perles. The capsules are managed without leaving an air-space, and the gelatin-coated pills are made on a system which does not require pins, but leaves the whole surface of the pill smooth and bright. In galenicals we noticed a well-made liq. ferri peptonati, and in soluble essences a specially well-flavoured tangerine-orange essence. The perfume department is represented by "sweet-pea" essence, a life-like perfume, and a make of eau de Cologne which runs the original close

Mr. A. S. HERMES is showing his auto-pressure filter, illustrated and described in the C. & D., July 27, page 182.

Messrs. INGRAM & ROYLE (LIMITED) are showing Hunyadi water, Carlsbad waters and salts in various forms, the natural Sprüdel salt, a series of three Vichy waters—"Celestins," "Grande-Grille," and "Hopital"—the latter for stomachic derangements.

Messrs. J. P. Jackson & Co. have soda-water machinery Their patent soda-fountains are fitted with a delivery-tap, which, it is claimed, does not separate the gas and water, as others are apt to do. A glass of soda-water drawn off through one of these taps retains the gas for a long time. New developments in the soda-fountain department are on the tapis. A water-motor bottle-washer and a machine for bottling still liquids are also shown.

The KEENE COMPANY exhibit the "one night" corn-cure, and a pile-cure called "Zeemo." Automatic counter-stools and movable showstands, are other lines shown here.

Messrs. Keetch & Co. have a small display of hair, tooth, nail, and shaving brushes, with no decided novelties in either series.

BLANCHE LEIGH has on exhibition numerous soaps and perfumes. The soaps sell at from 4d. to 3s. 6d. a cake, and all soaps contain a proportion of deodorised ichthyol, which gives them special skin-preserving properties. Cases of perfume and soap are shown for Christmas trade, and samples of the showcases which are supplied to customers.

Messrs. J. L. Lyon & Co. are showing a special patented filter-paper manufactured by Bernard Dumas. The papers

are of the usual circular appearance, but the centre of the paper is double-width, the idea being to strengthen the first, or bottom, fold which bears the strain. This is said not to interfere with the rapidity of filtration. The papers are made in different qualities—extra soft for alcohols and extra strong for oils and syrups. Sizes of from 10 c.c. to 100 c.c. capacity are made.

Messrs. Marion, James & Ker have on view their Royal Court hair-dyes, which chemists can adopt as their own. A novelty is the peach-bloom powder-leaves, consisting of sheets of paper prepared with a toilet powder, so that on lightly rubbing one of the leaves on the skin a coating of powder is left. Another new line is Labille's concentrated perfume essences, which are converted into triple extracts by adding to each ounce a pint of rectified spirit.

The ME MOSA COMPANY exhibit the Oowana soap, which

is in use on the Ophir.

The WM. S. MERRELL CHEMICAL COMPANY, besides the salicylates they are noted for, show vegetol toothpaste and powder, talborate (a toilet powder), lithia discs, and boronaphthol soap. The last named, a superfatted soap, is medicated with boro-glycerin, oil of wintergreen, and betanaphthol. Glycerin suppositories are put up in bottles and boxes, each suppository in the boxes being enclosed in a conical glass tube to preserve it from air influences. Iodozen, an iodine derivative of methyl salicylate and an iodoform substitute, is now supplied in both powder and crystal form.

Mr. A. Moryoseph's executors are showing cases of aloes

for manufacturing purposes."

Messrs. NEWBALL & MASON have a stall containing specimens of all their packed goods. The herb-beer and wineessences are the articles of this firm most known to chemists; but a new product—compressed pellets—should be inspected, as they are exceedingly well made Mason's coffee-essence ranks amongst the best of its kind, and visitors can have a cup of coffee made from the essence, and also taste the herb or wine essences. A selection of advertising ideas is also shown.

Messrs. Francis Newbery & Sons and Messrs. W. R. WARNER & Co. have a combined exhibit effectively displayed towards the upper end of the theatre. The Charterhouse specialities and the St. Paul's series of perfumes and toilet articles are done full justice to, and trade in Christmas goods is being well kept forward. Artificial flowers, perfumed in great variety, are the latest addition. A combination vaginal douche and receiver in enamelled ware, which is worked by an indiarubber bulb, is compact and novel, and the 1d. tubes of "Oriental cachous," carded, are likely to attract the casual customer. In Messrs. Warner & Co.'s section the latest departure is the packing of lithia lentiforms in packets of twenty-five, to retail at 1s. Blaud's pills are shown which have been first sugar-coated, then silvered, and, lastly, bottled. The solubility of the Warner pills is demonstrated in a glass of water, in which the pill (or tablet) is suspended by a gauze septum.

Messrs. J. Norrenberg & Co. show pocket medicine-

cases and various medical tablets.

Messrs. Paine & Co. (Limited) show the "John Bull" brand of extract of malt, and the same extract combined with cod-liver oil. We saw here also powdered malt, which is used largely by some makers of infants' fool.

Messrs. PALLETT & Co. are laying much stress on their orange-wines and dandelion-wines, "specially prepared for use with tonics." They have also a special "dry cyder," and

manufacture various liqueurs.

PAPIER POUDRÉ (LIMITED) have an exhibit which lady visitors find a source of much attraction. Papier Poudré is a delicate natural-coloured absorbent paper with a prepared surface of toilet-powder. The paper is put up in dainty little books for the pocket, so that madame, when out shopping or visiting, may carry with her the means of renovation in a most compact form. As the representative puts it, "each leaf is a kind of a dry wash." Other preparations put up with equal daintiness are "Massoline," Circassian facial cream and facial wash, Aix-la-Chapelle skin-purifier, and a series of Poppœa toilet-preparations.

Messrs, PARKE, DAVIS & Co. have a white-and-gold stand ornamented with handsome show jars and bottles of American design. One very handsome cut bottle with gilt fittings attracts special attention by reason of the pretty green. yellow fluorescence of the solution of uranin with which it i

The exhibit contains specimens of most of the galenicals in which this firm have specialised, and among the articles for retail trade may be noted the uncoloured insectpowder. This is put up in 10-lb tins and 50-lb. kegs, and is of a dull greyish-yellow colour. Boxed goods are represented by sulphur and bronchial lozenges, the latter by no means unpleasantly flavoured. These and tubes of liver-pills can be had with the chemist's name printed on, on certain The "Euthymol" toilet specialities monopolises conditions. one side of the showstand, the "Euthymol" tooth-paste still enjoying an increasing sale, which in itself is an index of appreciation.

Messrs. J. F. Pease & Co. (Limited) display the various kinds of stamped-steel barrels they make. These are fitted with small pumps, lever tops, or screw tops, as required. The steel used is either tinned or covered with zinc.

The PERCIVAL'S PHOSPHO-TONIC COMPANY are exhibiting the phospho-tonic which "makes you as strong as a lion. The (dummy) lion is present to point the moral, and the representatives in attendance suitably adorn the tale. Under the ægis of this exhibit Knowles's "Esauline" is also shown, and various novelties of Aërators (Limited). The latest sparklet apparatus is the Maxator machine—a metal container for making aërated water in the bottle on the spot—of course with the aid of a sparklet. The 1901 syphon, also made by Aërators (Limited), is covered with cane to prevent accident in case of breakage, and is an adaptation of the sparklet to the syphon.

Messrs, John Phillips & Son have a "sponge-cabin" fitted up to the right of the main entrance. In the construction of this cosy reception-room 302 cases of sponges are employed, besides loose goods of all kinds and qualities

in cases and bales.

PORCHERINE (LIMITED) are showing their liquid sweetener. The latest is a neat amber-coloured drop-bottle filled with the liquid for sale by chemists. The bottles are pretty, can be had to retail at 1s. upwards, and the advantages of the drop-bottle to a customer for sweetening tea or for other domestic uses are obvious.

The PORTIA COMPANY show a combined stocking-suspender and shoulder-support, which is recommended as antidotal to round shoulders and contracted chests.

Messrs. Potter & Clarke occupy one of the boxes. Mr. Potter, jun., is in attendance, and takes the visitor glibly through the novelties. These include 1d. packets of "King's cachous (in anticipation of the Coronation), camphorviolets amulets, menthol tablets (to sell at 1d. per oz. for popular winter sale), Anconia liquorice-juice (to sell at 3d. a stick), and a 6-oz. panelled egg-emulsion of cod-liver oil to sell at 1s. There are on show besides many specimens of herbs of the firm's own growing, such as biennial henbane, chamomiles, peppermint, pennyroyal, &c, coca-kola wine with quinine, and a large selection of packed herbs.

PRICE'S PATENT CANDLE COMPANY (LIMITED) have side by side bottles of Price's glycerin and B.P. glycerin, and also show a variety of preparations of glycerin. Another feature is the variety of toilet-soaps, one "Melbalm" being pnt up especially for chemists. A dozen of the coupons, of which one is contained in each box of three cakes of melbalm soap, entitles the chemist to an extra box if he returns

the coupons. Ox-gall soap, for cleaning carpets, is a line which "family" chemists will find sell well.

The ROBERTS'S PATENT FILLING-MACHINE COMPANY have in action one of their filling-machines. We are assured that an active worker can fill from 1,000 to 1,500 bottles of coughmixture in an hour by the aid of this machine. The apparatus is worked by the foot, and it is claimed that the valve through which the fluid flows is so finely adjusted that not a drop of fluid escapes after the lever falls.

The ROYAL STANDARD WINE COMPANY make a feature of beef-and-malt wine and coca-wine. Mr. Holloway, one of the proprietors, explained to us the steps a chemist needs to take to obtain a wine-licence, and, as the process is somewhat complicated to a novice, he undertakes to put the matter through for customers. The Standard stall is noticeable for the grape-vine which grows in front of it.

The preparations of the SANITAS COMPANY (LIMITED) are accorded a prominent corner display near the entrance. Samples of each of the "Sanitas" series are shown (and the list is no small one), and the Kingzett inventions, mechanical and chemical, are present in force. The

"Sulphugators" and utensils for the distribution of formaldehyde are exciting most interest.

Messrs. F. SCHUTZE & Co. have the butter-milk ball soap and Scotch oatmeal soap in prominent positions on their stall. The "Hausa Platz" brand of eau de Cologne which they sell is being pushed by means of large show-bottles wickered and labelled like the smaller sizes. Reproductions of the medals and certificates which have been awarded this brand of eau de Cologne are also snpplied to chemists. Fancy cases containing bottles of perfume for Christmas trade are shown in great variety.

Messrs. Seabrook Brothers & Co. have a neat little exhibit in a position in the theatre which would be designated "a good front seat in the stalls." The show presents numerous specimens of the "Wizard" cameras, "Cycle" series, including one furnished with a special quality of single lens, which is said to require a lot of

beating for speed and definition.

Mr. H. SILVERLOCK displays specimens of his label-printing and book-work. The calendars for 1902 are already being printed, and orders booked for delivery at the end of this year. Temperature-charts and wrapping-papers are other special lines.

SINARO SPRINGS (LIMITED) have a pretty little exhibit of Sinaro water, with views of the springs at Nastaetten.

Messrs. N. W. STILES & SON have a good show of American soda-fountains, the great attraction being the 1,000l. fountain figured in the C. § D. last week. "We will meet by the fountain" was an expression frequently heard at the time of our visit, the reason being apparent when it is mentioned that coupons for free drinks were supplied to visitors. The syrup-containers used in the Matthew's fonntains are of glass, and the valve which lets out the dose of syrnp works with a perfect cut-off, so preventing waste of syrup and unsightliness.

Messrs, A. DE St. Dalmas & Co. have samples of their manufacture of bandages and plasters. The "Unnacloth" dressing is a modification of Professor Unna's plaster-mulls, the feature being the non-greasy basis. The "Leicester" plaster-stand is arranged for using rolls of plaster without letting them come in contact with the caddy or table. The "Leicester" menthol·leaves are an improved menthol-plaster. The range of bandages includes the crepe and selvedge varieties. A special quality of plaster of Paris bandage is distinguished by the fact that the plaster is thoroughly incorporated with the fabric, which makes it cleanly in use.

Messrs. John Timpson & Co. (Limited) exhibit ratcheese, which we are told is a powder-form of poison for rats. The model rats and mice creeping all over the exhibit onght to make lady visitors shriek, they are

sufficiently life-like.

The TOP NOT COMPANY exhibit the Top Not specialities. The Top Not medicated soap for the hair is put up seven cakes in a box to sell at 6d.—one cake is used for each head-shampoo. The Tell Tale syrup of bananas, a laxative syrup recently introduced, is shown with bunches of bananas, and some excellent showcards to advertise it. Another novelty here is Henri Monoco's Swiss cream-soap, a nicely-scented soap, prepared in Switzerland, which should take well.

The VINOLIA COMPANY (LIMITED) show specimens of all their perfumes and soaps. There are some new designs in boxed perfumes, one very pretty box being in imitation ormulu, and another resembles chased silver. A new series of 2d. oval toilet-soaps, including Parma violet, heliotrope, and rose, appears to be excellent value. Among the better soaps the Losaria peau d'espagne is noticeable, on account of its penetrating perfume and the handsome style it is put up.

VIROL (LIMITED) are pointing out that Virol is an ideal food for inmates of sanatoria for the treatment of phthisis, and that it has already been adopted by the leading sanatoria. The composition the company impresses on visitors is not secret, but the right proportion of the marrow, malt extract, eggs, and lemon-juice was only arrived at after a stndy of the time taken for digesting the respective nutriments. The emulsion is prepared by machinery, and never separates.

The WELCH GRAPE-JUICE COMPANY show non-alcoholic "wines" and cordials, the latter designated "concordials."
The Westminster College of Chemistry and Phar-

MACY (LIMITED), with Mr. Wills, jun., in attendance, has also a box. The principal of the College was nuable to be

present in the evenings to welcome old students and friends of the College, and explain the merits of the Wills's text-

hoo'ss, a supply of which is on show.

Machinery for manufacturing and filling gelatin capsules in large quantities is shown by Messrs. S. W. WILKINSON & Co. The moulds only are shown, in various sizes and shapes, and are simplicity itself in the working. The mould being unscrewed, a thin sheet of gelatin is first placed heneath, the medicament to be used is poured in the mould, another sheet of gelatin is placed on top, the machine reclamped, and the whole put into a press. The finished capsules are elegant smooth and contain no unsightly excrescences.

elegant, smooth, and contain no unsightly excrescences.

Mr. VINCENT WOOD shows samples of his manufactures in surgical bandages and hosiery. The new "Eureka herno" truss is one having a pad of an elastic composition resembling indiarubher in some respects, but superior to it in pliability. The contents of the stall are representative, and are, in fact, the samples one of Mr. Wood's travellers is taking to South

Africa with him in September.

Messrs. Wyleys (Limited) have an exhibit of galenicals and packed goods. Sir James Sawyer's ung. ranunculi—a pale-green preparation—is being shown, also the series of developing cartons and pellets mentioned in the C. & D., August 24. Veterinary preparations are another speciality of this firm, and it is interesting to note that 442,800 duraplastic horse-balls (about 12 tons) have been supplied to the Army Veterinary Department in South Africa. The packed goods which Messrs. Wyley supply are known as the "Three Spires" hrand. The syrup of glycerophosphates put up in pretty cartons, and the capsicum or chillie paste in tubes, should he noted here.

The Young's PATENT HYGIENIC BIN SYNDICATE show galvanised-steel hins, the special feature about them being the round corners, which afford no lodgment. The hins are for storing such things as linseed-meal, hicarbonate of soda,

and Eosom salts.

Legal Reports.

Trade Law.

Liquidators' Responsibilities.—The case mentioned in the C. & D., August 24, page 352, in which the liquidator failed to send to the Registrar of Joint-stock Companies a statement showing the position of the liquidation, was disposed of on August 23. The Magistrate thought that Scction 32 of the Companies Act, 1900, gave him power to deal with the case, and he imposed a fine of 10l., and 2s. costs.

The Factory Act.—At Newcastle-under-Lyme on August 21, the representatives of the late Mr. John Wedgwood, manufacturing chemist, Audley, were summoned under the Factory and Workshops Acts for not having copies of the Acts posted in their workshops. For the defence it was stated that the defendants were under the impression that the works only came under the Alkali Acts, and not under the Factory Acts. A fine of 2s. 6d., with 8s. 6d. costs, was imposed.

A Chemist's Difficulties.—In the City of London Court on August 27, before Mr. G. Pitt-Lewis, K.C.. Deputy-Judge, Messrs. Langton, Fort & Co., 21 St. Dunstan's Hill, E.C., applied for the committal of the defendant, Mr. A. E. Bertie-Smith, chemist, 129 Lamheth Road, for not having paid 8l. 2s. due to them. The defendantsaid that he was not carrying on his chemist's business now. He had given it up ahout a year ago. The debt due was for goods supplied to that business. He was now engaged in aërating milk at 1l. a week. He would pay half the debt down, and then 15s. monthly. One of the plaintiffs said that the defendant told him that he had sold the chemist's husiness for 500l. The defendant said there was a contract for the sale of the chemist's business, but it had not heen sold. The payment would take the form of shares, and there would be no cash passing at all. The Deputy-Judge said he hoped the shares would turn out all right and he most valuable, and made an order for payment of half the debt down, and the balance by monthly instalments of 15s.

Incandescent Mantles..—At the Skipton County Court last week, Judge Bompas, K.C., gave judgment in an action by James Scott Higton, trading as the Skipton Bon Marché, draper, in which he sued John Aldersley, of Skipton, to recover damages for an alleged breach of warranty on the sale of a dozen mantles for incandescent lamps. The mantles were sold for use in the plaintiff's shop, and while being so used the Welsbach Incandescent Company (Limited) gave notice that they infringed their

patent, and as there was no discontinuance they commenced an action for an injunction against the plaintiff. He, after giving the defendant notice and eliciting no reply from him, settled the action by payment of 5l. 5s. The whole cost to the plaintiff, including legal expenses, amounted to 13l., and it was to recover this sum that the present action was brought. At the original hearing the question of jurisdiction was raised, and the matter was postponed to enable the Judge to look into the whole facts of the case. His Honour now said he was of opinion that the mantles really infringed the Welsbach patent, but the objection was raised on the part of the defendant that the patent was not valid, and that, therefore, there could be no infringement of it; and further, that as the validity of the patent, which is a franchise, thus came into question, his jurisdiction was ousted. That objection he held to be unfounded, and he was of opinion that he had jurisdiction. The patent was valid. He thought the plaintiff was entitled to recover the amount of the damages claimed, with costs.

Delayed Delivery of Isinglass.—In the City of London Court on August 28, before Mr. E. B. Tattershall, Assistant-Registrar, Messrs. E. Thompson & Co., 16 Duke Street, Aldgate, E.C., sued Messrs. J. Burlington & Co., isinglass-importers and chemical-manufacturers, Edge Hill, Liverpool, to recover 31. 7s 8d. for isinglass supplied. From statements made it transpired that in July Mr. Burlington requested delivery of a parcel of isinglass, and enclosed a sample which they were to match. The isinglass was described as "choice rolled leaf isinglass." They were also to forward 14 lbs. of Manilla isinglass. The defendants had had dealings with the plaintiffs for some seven or eight years, and had always obtained his goods by return. The order sent was for goods "to-morrow," and it was sent on a Thursday. The isinglass did not arrive at the railway station until the following Thursday, a week late. On June 15 an invoice was received from the plaintiffs, with a note at the bottom saying, "Awaiting favour of a cash remittance." Such a note had never been sent to him before, and as he did not get the goods he bought the isinglass elsewhere. When the isinglass was ultimately tendered from the plaintiffs he refused to accept it. The plaintiffs' representative said that Mr. Burlington, having sent a sample of isinglass which he required to be matched, must kave known that it would take some time to manufacture, and then it had to be sent from their works to Liverpool. The Assistant-Registrar said that the defendant in his order had underlined the word "to-morrow." If the plaintiffs could not supply the goods in that time, they should have written to the defendant and said so The plaintiffs' representative said they had delivered the isinglass as quickly as they could. The Assistant-Registrar, after hearing evidence, said the plaintiffs had hrought the dispute upon themselves by not writing to the defendant and informing him that the isinglass would have to be manufactured. There would be judgment for the defendant, with 41. 3

High Court Cases.

STREAM POLLUTION.

In the Dablin Court of King's Bench, on August 21, before Judge Barton (sitting as Vacation Judge), in the case of Hill v. Chemical Salt Company (Limited), Mr. W. H. Brown, B.L., applied for liherty to substitute service of the writ in this case by serving the resident-manager at the works, Carrickfergus, co. Antrim. The action is brought to restrain the defendant company from polluting with hrine and offscourings of rock-salt and sewage-water a stream of water at Eden, near Carrickfergus. The registered offices of the company are in Glasgow, but the resident-manager at Carrickfergus was in daily communication with the company. His Lordship granted the application.

BILE BEANS.

In the High Court of Justice on August 28, the matter of the Bile-hean Manufacturing Company v. Arhlaster, which was an application by the plaintiffs for an injunction against the defendant, P. C. Arblaster, Birmingham, restraining him from the sale of a medicinal preparation which was not of plaintiffs' manufacture, came again before Mr. Justice Joyce, sitting as vacation judge. Mr. Sebastian said this was a case which was hefore his Lordship a fortnight ago, in which the defendant was sought to he restrained from selling a preparation under a name similar to that of plaintiffs'. Mr. Wright now appeared on behalf of the defendant, and it had been agreed to make an end of the matter. His (counsel's) clients would take a perpetual injunction in agreed terms, defendant to deliver up to plaintiffs certain labels, dummy-boxes, and posters which were similar to

those of the Bile-bean Manufacturing Company. Mr. Wright, on behalf of the defendant, assented to the course

[We are asked to make it clear that the defendant in this case is not connected with Arblaster & Churchill, chemists,

New Street, Birmingham. -- EDITOR]

Pharmacy Acts.

THE UNQUALIFIED SELLER.

AT Barnet County Court on August 20, an unqualified assistant in the shop of Mr. G. S. Boutall, chemist and druggist, at 7 St. John's Parade, Hendon, was fined 5*l*. (and costs on the higher scale), at the instance of the Pharmaceutical Society, for selling a bottle of Kay's compound essence of linseed.

Merchandise=marks Act.

AERATED-WATER BOTTLES.

AT the Lurgan (co. Armagh) Petty Sessions on Angust 20 Mrs. Isobella Crawford, of the Lurgan Bottling-works, was prosecuted at the instance of Inspector J. D. McVicker, of the Belfast Bottle Exchange (Limited), "for having sold aërated waters to which was applied a false trade description."

Inspector McVicker said he purchased on July 2 one dozen of sarsaparilla and soda-water, which was delivered by one of defendant's vans. The bottles were embossed with the names of the Belfast Mineral-water Company, Kirber & Co., Ross & Son, Cantrell & Cochrane (Limited), Excelsior Mineral-water Company, and Provincial Mineral-water Company. Defendant was not a member of the Exchange, but he could not say if the Exchange had ever sold any bottles to Mrs. Crawford.

Mr. Menary, for the defence, said the Exchange robbed small traders in Lurgan, who were practically boycotted. Plain bottles were gathered in by members of the Exchange because they belonged to non-members, and his client had purchased from the Exchange bottles branded with the names of other people. Thomas Mooney, manager for defendant, said Mrs. Crawford was not a member of the Exchange, to which the annual subscription was 7l. Defendant had between 3 000 and 5,000 dozen bottles of her own in circulation. They had to buy their own bottles back from the Exchange. They had also bought from the Exchange about 200 dozen bottles with other firms' names on them.

The Chairman (Mr. Johnston, J.P.) fined the defendant 51, without costs.

In another case against Mr. Robert Thompson, aëratedwater manufacturer, Lurgan, for selling "genuine Dublin Stout" in bottles belonging to the Belfast Mineral-water Company, a fine of 51. was imposed.

A TASTING STIPENDIARY.

At the Burslem County Police Court on August 27, John Woodhouse, mineral-water manufacturer, Britannia Works, Hanley, was charged with unlawfully having in his possession, for the purpose of trade, seven bottles of aërated water to which a false trade-description was applied—viz., that of the Potteries Amalgamated Mineral-water Company. It was alleged that the defendant supplied seven bottles of girger-beer, having embossed on them the name of the company and not his own name, on May 9. The defendant and his son swore that the ginger-beer produced had not been made by them, because it had a "heading" on it. They sent out for three bottles of their ginger-beer, and asked the Stipendiary to compare it with the bottles the subject of the charge. The Stipendiary retired and tasted the two samples, and on returning said they were quite different, and dismissed the case.

The same defendant was then charged with a similar offence in respect to two bottles of lemonade which bore the imprint of Barlow's Lawton Spring (Limited). The defendant and his son again swore that the bottle produced was not supplied by them. The Stipendiary had some of the defendant's manufacture sent for, and, after comparing the samples, decided to convict, fining defendant 10% and costs.

Sale of Food and Drugs Acts.

SEIDLITZ-POWDERS.

At the Lambeth Police Court on August 26, Henry Smythe, of 19 Barton Road, Dulwich, was snmmoned for selling seidlitz-powders not of B.P. quality, and was fined 5s. and coasts.

SODA-WATER FOR POTASH-WATER.

At the Newcastle-on-Tyne Police Court on August 23, Geo. Andrews, manager of a public-house at 87 Clayton Street, was summoned for selling potash-water which was deficient of potash, but contained bicarbonate of soda. Mr. Parsons, for the defence, said the only explanation that could be given by the defendant and the manufacturers (the Newcastle and District Aërated-water Company), was that soda-water had got into the wrong bottles. There was no intention to defraud, but only a pure error committed. The Bench were of this latter opinion, and fined defendant 10s. and costs.

Bankruptcies and Failures.

Re William Weaver Baker (trading as W. Phillips & Co.), 215 and 217 Lewisham High Road, Brockley, Chemist and Druggist.

The trustee intimates that, under the deed of assignment executed by this debtor, all claims must be sent to him (Mr. W. A. Schultz, 50 Cannon Street, E.C.) by September 5, or they will be excluded from the benefit of the first and final dividend about to be declared.

Re M. L. Bauer (trading as M. L. Bauer & Co.), 11 and 12 Great Tower Street, E.C., Drug and Spice Merchant.

The first meeting of creditors under this failure was held at the London Bankruptcy Court on August 23, before Mr. E. L. Hough, Senior Official Receiver. The debtor commenced business some forty-two years ago as a drug and spice merchant in Mineing Lane, with a capital of 1,000*l*. to 1,500*l*. The business prospered down to 1879, when the failure of an African company involved the debtor to the extent of 100,000*l*. under acceptances of the company. He made a private arrangement under which the holders of those bills accepted 4s. 3d. in the pound, and the other creditors were paid in full. In 1894 the debtor was again in difficulties, and he arranged with several of the creditors to allow the debts to stand over in consideration of receiving a share of the profits during the ensuing five years. No profits, however, were made, and those creditors consequently received nothing. The business gradually dwindled away, and the expenses latterly had exceeded the profits, to which fact the failure is attributed. A statement of affairs has been lodged showing total liabilities 6,222*l*. 3s. 1d., of which 3,454*l*. 14s. 1d. are expected to rank, against assets valued at 281*l*. 19s. 5d., after deducting 90*l*. 9s. for the preferential claims. In the absence of any offer, the creditors decided to wind up the case in the ordinary course of bankruptcy. Messrs. A. Crump & Son attended for the debtor, whose public examination is fixed for September 24.

Bazette.

Partnerships Dissolved.

Gardiner, T. W. & G. (T. W. Gardiner and Robert Morrison, jun.), 143 Wellington Lane, Glasgow, chemical-manufacturers; as far as regards Robert Morrison, jun.

Leggett, J., and Leggett, H., under the style of James Leggett, M.R.C.V.S., & Haydon Leggett, F.R.C.V.S., Hanwell, Middlesex, veterinary surgeons.

Murray, Porteous, & Co., Muirhead, Larbert, and D. Moncur & Co., Arbroath (A. Porteous Murray, chemist and druggist, John Gardiner, A. M. Robertson, and F. Scatterl, aërated-water manufacturers; as far as regards A. P. Murray.

The Bankruptcy Acts, 1883 and 1890. ADJUDICATION.

Freeman, Delamark, Dorset Square, N.W., surgeon.

A SYNDICATE of gelatin-manufacturers has been formed at Warsaw, Poland.

New Companies & Company News.

H. B. S. Polish Company (Limited).—Capital 1,000*l.*, in 1*l.* shares. Objects: To investigate, test, prove, and subject thereto, acquire, develop, and manufacture and export or otherwise turn to account profitable secret processes for the manufacture of metal and other polishes, and preparations and all improvements therein, and for the above purposes to erect any works, mills, machinery, &c. The first directors are H. C. Cartwright, H. C. Gallagher, C. A. Francis, K. B. Bristow, C. H. Mason, T. Rogers, W. E. Smart.

Universal Mineral-water Machine Company (Limited).—Capital 50,000*l*., in 1*l*. shares. Objects: To adopt an agreement with W.P. Owen for the acquisition of an invention by J. Fletcher in relation to improvements in apparatus for carbonating liquids and filling bottles under pressure, and generally to carry on the business of brewers, maltsters, aërated-water manufacturers, &c. No initial public issue. The subscribers are to appoint the first directors, one to be nominated by W.P. Owen. Qualification, 250*l*. Remuneration, 100*l*. each per annum, 150*l*. for the chairman, and a share in the profits divisable.

NORTHAMPTONSHIRE SUPER-AËRATION (LIMITED). — Capital 7,500L, in 1L shares. Objects: To acquire from the Super-aëration (Limited) the benefit for the county of Northampton, with certain restrictions of a licence relating to inventions for drawing off or dispensing aërated liquids, to adopt an agreement with W. Dulley & Sons (Limited), and to carry on the business of mineral-water manufacturers, makers of bottles, syphons, soda-water machines, gazogenes, and vessels, &c. Minimum cash subscription, 2,250L. The subscribers are to appoint the first directors. Qualification, 100 shares. Remuneration, according to profits.

LA COMPAGNIE CEREBOS (FRANCE) (LIMITED).—Registered with a capital of 50,000L, in 1L shares (13,400 deferred). Objects: To adopt an agreement between G. Weddell of the first part, J. A. France, H. G. Smith, T. H. Walker, J. R. Stewart, J. F. Pease, J. W. Swan, A. Nicholls, R. S. Watson, and G. Weddell of the second part, and W. S. Burton of the third part, and to carry on in France and the French colonies and possessions the business of manufacturers of and dealers in cerebos salt, and the general business of chemical, drug, and medicine manufacturers, manufacturers of chemical foods, &c. The subscribers are:—G. Weddell, Newcastle-on-Tyne, chemist; J. R. Stewart, Newcastle-on-Tyne, tea merchant; J. A. France, Newcastle-on-Tyne, merchant; H. C. Smith, Newcastle-on-Tyne, M.P.; A. Nicholls, Newcastle-on-Tyne, ship-broker; T. H. Walker, Newcastle-on-Tyne, surgeon; Mrs. E. Mawson, Ashfield, Gateshead; J. F. Pease, Darlington, iron manufacturer; and J. W. Swan, London, engineer, each with 250 shares. The first directors are George Weddell (managing director), James A. France, Hugh C. Smith, James R. Stewart, Thomas H. Walker, Alfred Nicholls, and Benjamin Tillier. Registered office, Cerebos Works, Picton Terrace, Newcastle-on-Tyne.

GRAPE VINEGAR COMPANY (LIMITED).—The creditors of this company (in liquidation) met on August 26 at the Carey Street offices of the Board of Trade, Lincoln's Inn, W.C., and passed a resolution appointing Mr. Edward Hobbs, chartered accountant, Jewry House, Old Jewry, E.C., as liquidator. The Chairman (Mr. H. M. Winearls) reported that the shareholders had decided to leave the liquidation in the hands of the Official Receiver, and there being a difference of opinion on the matter between the creditors and shareholders, the appointment would be made later by the Court.

Business Changes.

MR. J. JONES, 25 and 27 Caroline Street, Bridgend, Glam., is having his shop refitted by Messrs. Treble & Son, the London shopfitters.

A NEW PHARMACY has been opened in Claremont Road, Moss Side, Manchester, by Messrs. J. L. Smith (Limited), of Salford and Pendleton.

MR. CHARLES SANGSTER, chemist and druggist, late of Harlesden, has purchased the business lately carried on at Market Square, Crewe, by Mr. Shrubsole.

MR. ROWLAND SMITH, chemist and druggist, has bought the old-established business at 32 Market Place, Retford, formerly carried on by the late Mr. C. Appelby. MR. F. R. SMALLMAN, chemist and druggist, has recently opened a business at Sandy Park, Brislington, Bristol.

OUR Manchester correspondent has ascertained that the rumour that Lewis's (Limited), of Market Street, Manchester, are giving up the drug-department of their business is well founded.

MR. E. F. W. THORP, chemist and druggist, has left the shop he formerly occupied in Great Western Street, Moss Side, Manchester, and has opened a larger and bettersituated pharmacy in Princess Road, Moss Side.

Recent Wills.

DEAN.—Probate of the will of Mr. Samuel Dean, chemist and druggist, 320 Roman Road, Bow, E., who died on January 31, 1901, has been granted to his executors, Helen Jane Dean, widow, and Herbert Samuel Dean, journalist, son of the deceased. The gross value of the estate is 1,174*l*. 4s., and the net personalty 8381. 16s. 4*d*.

Ford.—Probate of the will has been granted of Mr. Edward Becks Ford, pharmaceutical chemist, Commercial Street, Pontypool, who died on February 13. The executors are Percy Bowers Ford, corn-merchant, Godfrey Charles Ford, chemist, and William T. Woolley, draper—all of Pontypool. Power is reserved in the said will to make a like grant to Jane Ford, the widow. The gross value of the estate is 310l. so far as can be ascertained.

Gabites.—The will of the late Mr. William Gabites, chemist and druggist, 51 Upper Warwick Street, Liverpool, has been proved at the District Probate Registry, Liverpool. The sole executrix is Mary Gabites, of Owston Ferry, Lincolnshire, spinster, and sister of the deceased. The gross value of the estate is 2,198l. 3s. 10d., and the net personalty 1,314l. 15s. 4d.

ROBINSON.—The estate of Mr. William Leckie Robinson, of The Elms, Coventry, and of Robinson Brothers (Limited), Ryder's Green, West Bromwich, tar-distillers, has been valued at 128,544l. gross, including net personalty 119,069l. The will, which bears date June 29, 1900, with a codicil of September 13, 1900, bequeaths to the Baptist College at Bristol 1,000l.; to the principal of the said college 1,000l.; to the Baptist Missionary Society, Furnival Street, Holborn, 1,000l.; and the testator devises to the trustees of the Queen's Road Chapel, Coventry, the freehold of a piece of land near Cow Lane, containing 1,709 square yards, in trust for the erection of a Sunday school or schools or place of Divine worship, and to be used always as a Baptist school.

SABJEANT.—The late Mr. John William Serjeant, J.P., chemist and druggist, Silver Street, Wellingborough, who died on January 25, has left a net personalty of 3,2494. 12s. 8d., the gross value being 8,2124. 13s. 7d. Probate was granted to his executors —Joseph Frederick Sarjeant, of Loughborough, farmer, his brother; Joseph Barber Glenn, 77 Carleton Road, Holloway, secretary; and Peter James, Wellingborough, grocer.

Practical Motes and Formulæ.

MOSQUITO-EXTERMINATION.

Some experiments have been made as to the best oil to use for spreading on the surface of water in connection with Major Ross's experiments in West Africa on the extermination of mosquitos in a limited area. Dr. Kohn, of the University College, Liverpool, finds that crude petroleum or crude creosote oil fulfils the required conditions. The crude creosote oil is one which has a sp. gr. of 1.040, and 65 per cent. distills between 210° and 260° C. The high boilingpoint ensures that the oil loses little by exposure in hot climates.

CREME DE MENTHE.

For the soda-fountain:-

 Oil of peppermint
 ...
 ...
 gtt. xxxij.

 Sugar
 ...
 ...
 3lvj.

 Deodorised alcohol
 ...
 ...
 3lij.

 Distilled water q s. to make
 ...
 Oviij.

Dissolve the sugar in the water, and the oil in the alcohol; mix the two solutions, and colour green. Then let stand twenty-four hours, and filter clear.

To Serve Creme de Menthe.—Juice of one-half lemon; creme-de-menthe syrup, 1 oz. Place in 12-oz. glass, fill half-full of ice, add 6 oz. of soda-water, mix by stirring, and strain into a tumbler.

Analysis of Camphorated Oil.

By J. F. LIVERSEEGE, Ph.C., F.I.C.

THE use of the refractometer for the detection of foreign Leonard and W. H. Smith (Analyst, xxv. 202), and experiments were undertaken to ascertain the extent of its usefulness. The oils were examined in a Zeiss butyro-refractometer, at a temperature of 25° C. In most cases there was a coloured fringe to the shadow, and the reading was taken at the left-hand edge of it; it was not found possible to read with a greater accuracy than one-third of a scale-division. Probably, if a sodium-flame was used as the source of light, greater accuracy might be obtained by the removal of this coloured edge. When the stream of water had been adjusted to give the right temperature only a very short time was necessary to examine an oil.

The following table gives the figures for various oils, and also for camphorated oils prepared from them, of the British Pharmacopæia strength; the other analytical figures were given in a previous paper (THE CHEMIST AND DRUGGIST, January 26, 1901). The refractive indexes have been calculated from the scale-readings. The standard oil supplied with the instrument gave a reading of 71.2:—

Oil	Scale- reading	Refractive Index
Olive oil, C Olive oil, C, camphorated Sesame oil, A Sesame oil, A, camphorated Arachis oil, A, camphorated Arachis oil, D Arachis oil, D, camphorated Colza oil Mineral oil, B Mineral oil, B, camphorated	 62·0 62·3 70 0 68 7 63·3 63·0 63·0 68·3 67·0 over 106 104·0	1.4672 1.4674 1.4723 1.4714 1.4680 1.4678 1.4678 1.4678 1.4712 1.4704 over 1.4928 1.4917

It will be seen that the addition of 21 per cent. of camphor makes very little difference to the amount of refraction of olive and arachis oils, and that, therefore, the refractive index of camphor in these conditions is very similar to that of these oils. In the cases of the other oils the refraction is notably diminished by the presence of camphor. Nine samples of camphorated olive oil containing about 20 per cent. of camphor gave scale-readings of 61-62. Two samples prepared in 1897 with olive oil, one of full strength and the other about half-strength, both gave a reading of 63.3. Below are given some figures for other oils. The first three samples of cotton-seed oil were some years old. The samples of almond and peach-kernel oils were examined to see if the refractometer would discriminate between these very similar oils. Unfortunately the differences are too small to be of much practical use :-

Oi	1		Scale- reading	Refractive Index
Olive oil, B Arachis oil, B Sesame oil, B Mineral oil, A Cotton-seed oil, A Cotton-seed oil, C Cotton-seed oil, E Almond oil Apricot-kernel oil, Apricot-kernel oil, Peach-kernel oil		 	61·3 63·7 68·3 92·7 71·0 71·7 71·3 67·0 66·3 65·3 65·3 64·3	1.4667 1.4682 1.4712 1.4855 1.4729 1.4733 1.4731 1.4704 1.4699 1.4693 1.4693 1.4637

The foregoing results show that the substitution of other oils for olive in the preparation of camphorated oil may, with the exception of arachis oil, readily be detected by the refractometer. In cases where the high iodine-absorption of

the oil and high melting-point of the fatty acids indicate arachis oil an attempt should be made to separate arachidic acid by the following somewhat tedious method of Renard:

acid by the following somewhat tedious method of Renard:—Weigh about 5 grammes of the oil in a conical flask of about 100 c.c. capacity. Add 20 c.c. spirit and 5 c c. IONKHO solution, close with a watch glass, heat on the top of a water-oven for about one hour, shaking occasionally till solution of the oil is complete. Add phenolphthalein solution, neutralise with strong acetic acid, and add 10 c.c. 2N acetate-of-lead solution. Cool, filter through 12½-cm. filter, and wash with spirit till washings are colourless. Allow to drain some time, and transfer to the flask; add ether; shake occasionally till the lumps are broken up, and allow to stand till the supernatant liquid is clear; decant through a 9-cm. filter; wash again by decantation with ether; filter and wash with ether till the washings are colourless. When dry, transfer to the flask, add an excess of HCl (about 25 c.c. normal), and heat on the water-bath till the fatty acids are fused; fill up with boiling water so that they may come up into the neck, and cool. Remove water and chloride of lead as much as possible; add 25 c.c. 90-per-cent. alcohol; heat to boiling on the water-bath, and filter; treat with a little more hot alcohol if necessary. filter; treat with a little more hot alcohol if necessary.

On cooling the filtrate to 15° C. a sample of camphorated oil prepared with olive oil gave a slight turbidity only, but one prepared with arachis oil gave a copious crystalline precipitatate. This precipitate was filtered out, washed with 90 per-cent. alcohol, and then with 70 per-cent., and dissolved in boiling absolute alcohol. The filtrate was evaporated to dryness, and the arachidic acid weighed; after adding 0 022 gramme for each 10 c c. of the 90-per-cent. alcohol filtrate and washings, the weight was equivalent to 2.75 per cent. of the camphorated oil taken. A camphorated olive oil treated similarly gave cnly 0.14 per cent. The melting-point of the arachidic acid determined by the capillary-tube method was 71° C.

At the Counter.

This was written on a jagged piece of cardboard: "Pennyworth of sweet nitre, or would salts be better for a little cat which is costive and not passing water.'

SELECTED.—"Dr. Veno's turpentine"; "ox and rabbit acid"; "classical ancient acid"; "please for one of them things 'at makes Buller"; "stuff pudden 'eds" (hyd. am. chlor.). These, writes Mr. W. B. Brackenbury, of Middlesborough, are a few samples of the demands upon his "professional" knowledge.

MR. C. MYERS, of Hull, had the following quaint request recently sent him :-

Mr Mires you av never sent mee that opum and it is putting me about i canot rest at nights with it pleas to send it as soon you cann i av paid for it 2 pennie worth you av mis sending it before.

Note the phonetic spelling of "have."

THE following incident, concerning one of those small indiarubber mats placed on counters for receiving cash, occurred quite recently at a Dublin pharmacy. A very small but well-dressed lad entered and asked for an "Alcock's porous plaster." His change was got from the till and placed on the mat before him. The man of drugs then turned his back to procure the plaster, but on returning again to the counter was much surprised to find that the boy had disappeared. In ten minutes or so, however, the boy returned bringing with him the indiarubber mat, and holding it up exclaimed, in rather an indignant tone, "Mother says this is not an Alcock's porous plaster!

FRA' TH' TYNE .- A firm of wholesale druggists in the North Countrie sends us a batch of requests from rural customers. We select the following: -

- 1 box excet beef sell at shilling.
- 1 box boverily 2 oz.
- box sence 3 packet.
 Herb Toilet soapsell 3.
 box docter tibley coca 6.
- box Fem theeth powder peny
- 1 doz. two glnec bottle. $\frac{1}{2}$ doz. glnece three bottle. 6 doz. tbree camat oil.

- doz. compition essence.
- galens nuchen oil.

Please send prizes of salt and whosing soider in wholsal.

It will thus be observed that some wholesale customers are not much better than the unlearned retail variety.

Trade Report.

NOTICE TO BUYERS.-The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C.: August 29.

No tangible improvement can be reported in business this week, and fluctuations in prices are principally of minor interest. Quinine has been marking time in the outside market in view of the Amsterdam-bark sale reported on page 392. Opium is unchanged with a small business. Almond oil and peach-kernel oil are lower. Thymol is 6d. dearer. Chamomiles come lower from Belgium, and colchicum-seed has been advanced. Isinglass sold well in auction at better prices. A reaction has taken place in shellac, owing to a reduction in the Calcutta price. Heavy chemicals are mostly without change. The following are the principal alterations of the week, including those occurring at the drug-auctions :-

Higher	Firmer	Easier	Lower
Cardamom seed Cinnamon (fine) Colchicum seed Elemi Guaiacum (common) Isinglass Oil, caraway Thymol Wax, bees (Jam.)	Ginger (Jap.) Honey Saltpetre	Buchu Chamomiles	Oil, almond Oil, peach- kernel Senna (Alex.) Senna-pods Shellac

Arrivals.

Arrivals.

The following drugs, &c, have arrived at the principal ports of the United Kingdom from August 22 to 28, both inclusive:—Aloes (@ Mossel Bay), 22; anise (Russ.), 138; arrowroot (@ Natal), 55; arsenic (@ Oporto), 334 brls.; bismuth ore (@ Sydney), 5 cks.; buchu (@ Cape Town), 41; calumba (@ Aden), 189; camphor (@ Hamburg), 5 cs. 146 tubs; cardamoms, 80½ chests; caraway-seed, 225; castor oil (E.I.), 190, (@ Italy), 40 cs.; cinchona, (@ Colombo) 108, (@ Amsterdam) 105, (@ Madras) 90; citronella oil (@ Colombo) 58 drums, 5 tanks; chamomiles, 103; cochineal, 6; cocoa-butter, 30; cod-liver oil, (@ Hamburg) 30, (@ Drontheim) 77, (@ Bergen) 255; coriander-seed, 25; cream of tartar, 72; cumin-seed (@ Marseilles), 6; drugs (@ Hamburg), 5 bls. 10 bgs.; ergot (@ Vigo), 67; essential oils (@ Messina), 17 cs.; galls (@ Smyrna), 10; guinea-grains (@ W.C. Africa), 13 bgs.; gum arabic, (@ W.C.A.) 92 pkgs., (@ Aden) 29 cs.; gum, unenumerated (@ Havre) 70 cs., (@ Karachi), 27 cs.; honey, (@ Jamaica), 88 pkgs.; juniper-berries, 200; lemon-juice, 20 pps.; lime citrate, 60 cks.; opium, (@ Italy) 35 cs., (@ Const.) 11; orris (@ Italy), 60 lbs.; pepper (@ Singapore), 364 bgs.; potash chlorate (@ Antwerp), 20; quicksilver, (@ Italy) 100 flasks, (@ Malaga) 34; roots, (@ Bahia) 55 bgs., (@ Baltimore) 41 bgs.; scammony-root (@ Salonica), 7 bls.; senna (@ Colombo), 40; senna-pods (@ Colombo), 33; shellac, 355; button, 87; squills, 43; sulphur (@ Catania), 560 bgs, 473 cks., 50 brls.; tamarinds (W.I.) 2, (E.I.), 50; tartaric acid, 66; vanilla (@ N.Z.), 12 cs.; wax, bees', @ Jam.) 16, (@ Hamburg) 4 cs., (@ Natal) 13 pkgs., (@ Aden) 96, (Ital.) 5.

Heavy Chemicals.

Although business in the heavy-chemical market still continues of a quiet nature at all the main centres, there is nevertheless a somewhat better all-round demand existing than of late, and both home and export orders are more numerous and heavier. Values for near and prompt delivery remain practically unchanged, but |

for next year somewhat lower figures are ruling. In this branch, however, no great amount of business has so far been transacted SULPHATE OF AMMONIA still keeps rather quict, and to-day's values are about 2s. 6d. per ton lower than those last quoted. Export from Leith last week amounted to 731 tons.

EXPORT From Letth last week amounted to 131 tons.

Sulphocyanides are only in moderate request, and values keep low. Potassium, 7\frac{1}{4}d. to 7\frac{1}{2}d. per lb.; ammonium, 95 per-cent., 6d. per lb.; and barium, 95 per-cent., 4d. per lb.

Saltpetre is firmer at quotations as follows:—British refined,

Sattpethe is firmer at quotations as follows:—British refined, barrels and kegs, 21s. and 22s. per cwt. respectively; German barrels 19s. 9d. per cwt, and kegs 20s. 6d. per cwt.

Lead-Products are in fairly steady demand, and particularly so the white sugar of lead at 23t. 10s., less 2½ per cent. Glasgow. Brown sugar of lead is 18t. 10s. per ton, less 2½ per cent. Glasgow; and the nitrate of lead, 23t. to 23t. 10s., less 2½ per cent.

Glasgow.

BARIUM-PRODUCTS steadily maintain the firm tone which has been ruling in this branch for some considerable time past. The mineral carbonate of barytes (witherite) is now in somewhat better supply, but yet can only really be described as being scarce. Quotations vary according to strength and quantity required. Blanc fixe, pure precipitated sulphate of barium in paste form, in steady demand at 7l. 5s. to 7l. 15s. per ton in casks. Mineral in steady demand at 1l. 5s. to 1l. 1ss. per ton in casks. Mineral sulphate of barytes, ground, in brisk request at prices from 40s. to 10cs. per ton, according to quality, quantity, and package. Chloride of barium, ordinary refined crystals, in bags, 7l. to 7l. 10s. per ton, and in usual casks, 7l. 5s. to 7l. 15s. per ton. Hydrate of baryta, purest crystals, is in better supply, at 14l. to 14l. 1cs. per tonex stock in 6 and 7 cwt. casks. Nutrate of baryta, crystals and powdered, 161. 10s. to 171. 10s. per ton in original casks, free on rails. Sulphide of barium, crude calcined, about 70-75 per cent., 5l. 10s. to 6l. per ton in casks.

Liverpool Drug Market.

Liverpool, August 28.

Castor Oil.—In consequence of the nearness of arrivals by the s.s. Statesman, good seconds Calcutta have become available at $3\frac{1}{16}d$.; while first-pressure French and first-pressure English are held for the same figure. Second-pressure French is scarce at the moment, but is nominally held for 3d. per lb. Forward quotations for good seconds Calcutta and French remain unchanged.

ACACIA.—Two parcels of 10 and 27 serons of good Soudan sorts have been sold at 45s. per cwt. There has been no movement in the finer descriptions this week.

GRAINS OF PARADISE are now obtainable only in very small

lots, and 50s. per cwt. is asked for the few bags remaining.

IRISH Moss.—Sales of good old dry are reported at 10l. per ton, though less might be taken for 10 to 20 bale lots.

Honey continues to possess little or no interest, as buyers are holding off in the meantime. Chilian ranges in value from 19s. to 32s. per cwt.; and Californian from 35s. to 45s.

BEESWAX.—Sales are reported of 14 sacks of good Chilian at

71. per cwt.

CANARY-SEED.—The tone of this article continues quiet, and the value of good bright Turkish may be taken as 32s. per quarter.

QUILLAIA.—Sales are reported at 13*l*. per ton. African Ginoer remains steady at 32*s*. 6*d*. to 33*s*. per cwt. for

good sound Sierra Leone. LINSEED maintains the recent high rate of values, although

very little business is passing.
CHILLIES, S.L.—A recent import has been cleared off at 46s. per cwt.

COPAIBA .- A moderate business has been done in cloudy

Maranham at 2s. $0\frac{1}{2}d$; and the market is now bare.

JABORANDI.—The recent arrivals, consisting of 22 bales small leaves, met with good competition in public auction, but were bought in with 6d. to $6\frac{3}{4}d$. bid; they were afterwards sold privately.

SPERMACETI has been in more inquiry, and 24 cases refined Chilian have been sold at 1s. $0\frac{3}{4}d$. per lb.

Wax, Carnauba.—Quiet, with small sales of ordinary mixed yellow at 65s. to 72s. 6d. per cwt.

German Drug Market.

Hamburg, August 27.

Our drug-market in general is quiet, and shows only very little business.

AGAR-AGAR is steady at 355m. to 365m. per 100 kilos., according to quality.

ALOES (CAPE) is firm and dearer at 65m. per 100 kilos.

Anise, Russian, is advancing and very firm; to-day's quotation is 38m. per 100 kilos.

CAMPHOR (REFINED) is very quiet, with second-hand sellers at

415m. per 100 kilos. CARAWAY-SEED is firm and advancing; new crop is held for

42m. per 100 kilos. CUMIN-SEED is firm; new crop at 56m. to 58m. per 100 kilos.

ERGOT is quiet; Russian of good quality is 350m., and Spanish 325m. per 100 kilos.

LYCOPODIUM for spot delivery is firm at 430m. per 100 kilos., and forward delivery 375m. per 100 kilos.

MENTHOL is firm at 26½m. per kilo.; for spot 27½m. is asked.

Quinine is dull, with second hand sellers at 40m. to 41m. per

SENEGA is tending firmer, and held at 370m. per 100 kilos. FENUGREEK-SEED is scarce at 14½m. per 100 kilos.

Cassia Lignea shows a firmer market.

Japanese Wax firmer, at 66½m. per 100 kilos.

Guinea-grains more freely offered at 110m. per 100 kilos., c.i.f. FOIL, CASTOR, is tending firmer; first-pressing in barrels spot, 58m. per 100 kilos.

LINSEED OIL keeps firm; cottonseed oil advancing.
ESSENTIAL OILS.—Star-anise oil is quiet at 11m. per kilo.
Caraway-seed oil and carvol advancing. Pepperment oil is very firm; $\overline{\text{HGH}}$ is quoted 7.25m. per lb., and Japanese $7\frac{1}{4}$ m. per kilo.

London Markets.

ACID, CITRIC, is unchanged, at from 1s. $2\frac{1}{2}d$. to 1s. $2\frac{3}{4}d$. per lb., according to quantity.

ARGOL.—The production of argol in the province of Lecce, owing to the small output of the vintage, was far smaller than usual during 1900; according to the Customs returns a total of 600 tons was exported (of which 54 tons had been imported). In the Chamber of Commerce statements only 280 tons are declared as having been exported, and these entirely to Austria-Hungary, but it is probable that small shipments have been forwarded coastwise for shipment to foreign countries. The leading firm dealing in this article has informed the British Consul that the total exports of argol of all gradations amounted to about 857 tons.

ARROWROOT.—At auction on Wednesday good St. Vincents sold at $1\frac{1}{2}d$. per lb., but the bulk was bought in at $1\frac{5}{2}d$. to $1\frac{3}{4}d$. and fine at $2\frac{1}{4}d$. to $3\frac{1}{4}d$. Fine, in tins, partly sold at 3d. per lb.

Belladonna-leaves are firmly held, at from 54s. to 55s. per cwt., c.i.f., according to quality.

CHAMOMILES.—Prices from Belgium come easier, and 80s., London terms, will buy good quality.

CINCHONA.—The imports into the United States for the twelve months ended June 29, 1901, amounted to 4.860,304 lbs., against 4,107,358 lbs. in 1900. In auction 72 serons Huanoco quill sold at from $5\frac{3}{4}d$. to $6\frac{1}{4}d$. for fair to good and $3\frac{1}{2}d$. for damaged; from another catalogue 42 serons were bought in at 7d. per lb., the limit being 6d.; for this parcel a bid of $5\frac{1}{2}d$. was refused.

CINNAMON.—The usual quarterly sales were held last Monday. There was a good competition, especially for the finer qualities, which sold at full to rather dearer prices, but the demand for the inferior grades being slow, about $\frac{1}{2}d$, per lb. reduction had to be accepted to effect business. The following were the prices realised:-

_	I.	II.	III.	IV.
Fine superior Good Ordinary	per lb. 1s. 3d. to 1s. 7d. 11d. to 1s. $9\frac{1}{2}d$. to 10d.	per lb. $1s.\ 2d.\ to$ $1s.\ 5d.$ $10d.\ to$ $10\frac{1}{2}d.$ $9d.\ to$ $9\frac{1}{2}d.$	per lb. 1s. 1d. to 1s. 4d. $9\frac{1}{2}d$. to 10d. $8\frac{1}{2}d$. to 9d.	per lb. 10d. to 11d. 9d. to $9\frac{1}{2}d$. $8\frac{1}{2}d$.

A few lots of bold clean chips sold at 3d. to $3\frac{1}{4}d$, per lb.

COLCHICUM-SEED is very scarce on the spot, and 1s. 6d. is now asked.

CUBEBS.—The shipments from Singapore from January 1 to July 22 amount to 101 piculs to Great Britain and 2,325 piculs to the United States.

DRAGON'S-BLOOD is very scarce, and fine quality is unobtainable. According to the Singapore-market report, the shipments from Singapore to Great Britain from January 1 to July 22 have been 55 piculs.

GALLS.—Only a small business has been done in Persian

blues, which are obtainable in second hands at 55s. to 56s. 6d. per cwt. The large holders are still off the market.

GUM TRAGACANTH.—The lower qualities of Persian still meet with a fair inquiry, and slightly higher prices have been paid, but the article is quiet generally. Firsts are quoted 15% to 15% 10s. per cwt.

ISINGLASS.—The periodical auctions were held on Tuesday, when the small supply of 584 packages were offered. There was an improved demand all round, and about two-thirds of the offerings were sold. Brazil was in larger supply, and met with good competition, lump selling at full rates to 1d. advance. East Indian was held for full rates, about one-third selling at steady prices. For Penang 2d. to 3d. advance was paid. Saigon was in small supply, and 3d. to 4d. higher.

JALAP.—Although there is no change in spot quotations (7d. to $7\frac{1}{2}d$.), holders are inclined to have firmer views, as stock, although moderate, has not been supplemented by arrivals for some time.

MENTHOL.—For Kobayashi crystals 12s. 6d., spot, is reported to have been paid, which is an advance of 3d. on the last quotation.

OIL, ALMOND.—English pressers have reduced their quotation for sweet (B.P.) to 1s. 5d., and pale to 1s. 7d. per lb.

OIL, CARAWAY.—B.P. quality has been advanced to 4s. 9d. per lb.

OIL, CASTOR .- Good Calcutta seconds is quoted on the spot at $3\frac{1}{2}d$. per lb.

OIL, COD-LIVER.—The London market is quiet; one agent who previously offered outright at 64s., c.i.f., now states that this figure is subject to confirmation, owing to firmer advices from Norway. According to our Bergen correspondent, the situation there is unchanged, with a few small sales at the parity of 63s. per barrel, f.o.b. The imports from Bergen up to date amount to 7,116 barrels, against 5,546 barrels at the same time last year.

OIL, OLIVE.—The flowering of the olive-trees in the Bari district of Italy promises well (according to a British Consular report), and justifies the expectation of a yield equal to two-thirds of a normal crop. The result in the Bitonto district, however, will hardly exceed half the yield of an average year, as only the trees down by the seaboard exhibit flowers, while in the mountainous region the trees show leaves only. On the line between Bari and Brindisi the crop is in a splendid condition, and promises an excellent result, provided the weather continues favourable. It is generally believed that the severe cold of last winter has destroyed a large number of the olive-fly larvæ. This pest was the cause of the terrible losses last season.

OIL, PEACH-KERNEL, has been reduced to $7\frac{1}{2}d$. to 8d. per lb., according to quantity.

OIL, PEPPERMINT.—Sales of Japanese dementholised oil have been made at 3s. 6d. per lb., and one holder now asks 3s. 9d.; a good inquiry has sprung up. American HGH is firm at from 7s. 6d. to 7s. 9d., London terms, according to

OPIUM.—In Persian opium business has been done at 11s. 6d. per lb., but holders are now asking 12s., which figure has stopped business. Turkey druggists' has also changed hands at 9s.

nanus at 38.

SMYRNA, August 16.—The market this week has been a little firmer, and the sales amount to 43 cases, as follows:—Twenty-seven cases of old Yerli talequale at 9s. 3d.; nine cases Karahissar talequale at 9s. 1d.; and seven cases new talequale at 8s. 11d. to 9s. per lb., c.i.f. The market closes firm, with buyers of new and old crop. The arrivals amount to 1,634 cases, against 2412 cases at the same time of last week.

CONSTANTINOPLE, August 23.—The sales during the past fortnight amount to 12 cases new druggists' at 8s. 6d.; and 30 cases "prime old Karahissars" at 8s. 8d. per lb., fo.b. The market is quiet, and if the present inactivity continues it will tell on holders, who already begin to show signs of anxiety to sell.

ORRIS.-Prices in Italy still remain very low, and from Leghorn 29s. 6d. per cwt., c.i.f., is quoted for picked Floren-

QUICKSILVER .- A good business has been done, and the market is very firm, at 91., with no second-hand offers.

QUININE.—Before last week closed the spot price in the "outside" market dropped still further to 1s. 1d. and December to 1s. $1\frac{1}{2}d$, but this week there has been a slight recovery and prices of good German sulphate are steadier, spot having advanced to 1s. $1\frac{3}{8}d$, and December delivery to 1s. $1\frac{5}{8}d$. to 1s. $1\frac{3}{4}d$. Only a small business has been done, however, and to-day operators are waiting the result of the Amsterdam bark sale, where a 15 per cent. decline is anticipated. A reduction of at least 2d. per oz. is expected in the "official" price.

The imports of "quinine and salts of" into the United States for the twelve months ended June 29, 1901, amounted to 3,660,022 ozs., against 3,113,749 ozs. during 1900.

SENEGA.—Very quiet and unchanged, with first-hand sellers asking 1s. $9\frac{1}{2}d$., spot.

SHELLAC.—At auction the small supply of 390 cases offered, of which 250 second orange were withdrawn, being firmly held; no TN quality offered. Of Garnet 100 cases offered, of which 8 sold at 59s. to 60s. for Rangoon block; and of 60 cases Button offered 40 cases of oddments sold at 71s. for resinous blocky firsts, ordinary worked seconds at 66s., and thirds ditto 59s. Privately a reaction has taken place this week, prices giving way 3s. to 4s., owing to a fall of 5r. in the Calcutta quotation for TN. Little business has been done, fair TN being quoted 74s, spot. In "futures" January delivery has dropped to 76s., which figure has been paid for several hundred cases.

SPICES — The market remains quiet, and without any noticeable feature. The parcels of Cochin Ginger offered at anction on Wednesday were bought in; bold cut at 95s., medium at 75s., and Calicut brown rough at 38s. per cwt. About half the Jamaica sold at steady prices; common to ordinary at 37s. 6d. to 42s., and middling to dullish bold at 43s to 45s, per cwt. Japan has been sold at 34s. 6d. per cwt, and 35s. is now the price, with only a small stock. Bengal is nominally worth 38s. per cwt. Zanzibar Cloves have Wednesday at $3\frac{25}{3}d$, per lb. for October-December delivery. Good Penang partly sold at $7\frac{1}{3}d$. per lb. Pimento firm, ordinary to fair selling at $2\frac{1}{3}d$. to 3d. per lb. Japan Chillies are selling privately at 45s. per cwt. Nutnegs steady; Penang 80's were held for 1s. 5d. per lb. Mace firm; fair to good pale West India sold at 1s. 5d. to 1s. 6d, and good heavy Penang at 2s. 3d. per lb. Pepper very slow, but steady, at 6d. per lb. on the spot for Singapore, and at $6\frac{1}{16}d$. for distant his most of the spot for Singapore, and at $6\frac{1}{16}d$. for distant shipment. Penang white was bought in at 8 d., and Siam at $9\frac{1}{8}d$. per lb.; Singapore is quoted at 9d. per lb.

SULPHUR.—The exports from Sicily during July amounted to 31,839 tonnes of 13 Sicil. cantars, against 27,530 tonnes during July, 1900. The stocks in Sicily at the end of July amounted to 206,827 tonnes, against 193,973 tonnes at the end of July, 1900.

THYMOL.—One holder has advanced his quotation to 10s. 6d. per lb. net, which is 6d. dearer.

TURMERIC.—In auction on Tuesday 129 bags rather wormy split Cochin bulbs sold at 7s. per cwt., and small finger was taken out at 20s; Madras finger was bought in at from 22s. to 28s., according to quality.

London Drug-auctions.

The auctions to day consisted of goods in the importers' hands, and there was a fair amount of interest in them. Buchu-leaves were slightly easier. Cardamoms sold irregularly, but at rather easier prices; seed was dearer, however. Calumba of low qualities was offered freely, but did not sell. Cascarilla sold at full prices. offered freely, but did not sell. Cascarilla sold at full prices. Elemi was a feature of the auctions, very high prices being paid for it. Jamaica honey brought firmer rates. Rio ipecac. was firmly held, and rather better prices were paid for Cartagena description. Kino sold at unchanged rates, and for kamala there was no demand. The meagre quantities of sarsaparilla offered brought unchanged rates. The offerings of Tinnevelly senna were uninteresting. Alexandrian leaf was cheaper, and so were pods. Tamarinds (West Indian) were all disposed of, and Jamaica

wax was slightly dearer compared with last sales. The following table shows the number of packages offered and sold :--

Offered Sold	Offered Sold
Aloes-	Lime-juice 2 0
Cape 22 0	Musk (grain) 2 0
East African 40 0	Nux vomica 13 13
Socotrine 10 0	Oil—
Annatto-seed 1 0	anise 10 0
'Araroba 14 0	castor (E.I.) 50 0
Argol 1 0	eucalyptus 10 0
Benzoin-	lime 9 2
Sumatra 101 35	neroli (China) 1 0
Buchu 33 4	Olibanum 11 11
Canella alba 8 0	Pareira brava 55 0
Calumba 311 0	Puree 2 0
Cardamoms 205 151	Sandalwood 102 0
Cascarilla 12 4	Sarsaparilla-
Cassia-leaves 2 0	(Lima-Jamaica) 12 12
Chiretta 21 0	(Native ,,) 17 5
Cinchona	Senna-
Coca-leaves 35 25	Alexandrian 57 40
Croton-seed 54 16	Tinnevelly 51 51
Cumin-seed 12 12*	Tamarinds-
Cuttlefish-bone 32 0	(W.I.) 102 102
Divi divi 200 0	Turmeric 36 0
Elemi 12 12	Turtle dried 4 0
Ergot 22 0	Valerian 10 0
Guaiacum 17 7	Vermilion 5 0
Gum acacia 209 10	Wax (bees')—
Honey (St. Kitts) 50 50	Calcutta 14 0
Jamaica 91 77	Jamaica 37 37
Ipecacuanha—	Madagascar 23 0
(Cartagena) 7 2 Rio 42 3	Morocco 41 0
	Mozambique 2 0
Kamala 46 0	Persian 4 0
Kino 5 1	Spanish 11 0
Kola 1 1	Zanzibar 123 27
* Sold I	orivatel y

ALOES.—No business in auction. Of Cape 22 cases were catalogued, but did not arrive in time. Ten kegs of Socotrine were shown and held for 75s., and for 40 cases so-called East African aloes no bid was made. The s.s. Dunottar Castle has arrived with 22 cases from Mossel Bay.

BENZOIN.—Sumatra was the only description offered, and a fair amount was sold; for good seconds, well packed with small to medium almonds, 7l. 15s. was paid, and not quite so good 71.7s. 6d.; good fair seconds brought 6l. 17s. 6d. to 7l, and fair ditto 6l. per cwt.

The exports from Penang to Great Britain from January 1 to July 18 have been 301 piculs. From Singapore, up to July 22, Great Britain has received 841 piculs, U.S.A. 134 piculs, and the

Continent 1,179 piculs.

BUCHU.—Very little was disposed of, and prices in auction were $\frac{1}{2}d$. lower, good round green leaf selling at $11\frac{1}{2}d$. per lb. and stalky at 11d. The s.s. Dunottar Castle has arrived with 44 bales from Cape Town.

CALUMBA.—For dark and inferior stemmy sorts 10s. per cwt. was wanted, and for small to medium part wormy ditto 9s. was refused, 10s. being wanted.

CARDAMOMS .-- A much better demand was shown to-day, and nearly all the catalognes were cleared at irregular prices, fine being easier, and the medium and lower grades bringing full rates. Good seed was 2d, to 3d, dearer. The billowing prices were paid:—Ceylon-Mysores, medium to bold pale, 3s. 5d.; bold medium pale, 2s. 4d. to 2s. 8d.; small and medium pale, 2s. 2d. to 2s. 3d.; ditto brownish, 1s. 11d.; small pale, 1s. 5d. to 1s. 9d.; very small pale, 1s. 4d. to 1s.5d; brown splits and pickings, 1s.4d. to 1s.5d.; bold pale splits, 3s.; medium ditto, 2s.1d. to 2s.2d., and small 1s.6d., with common at 1s.2d. Good dark seed sold at 2s. 2d. to 2s. 4d, and pale at 1s. 7d. to 1s. 9d. per lb.

CASCARILLA.—Dearer. Good bright, part silvery, quill sold at 65s., and for a bale of thin twiggy and dull 50s. was

COCA-LEAVES sold at unchanged rates, from 1s. to 1s. 2d. being paid for fair to good bright green Ceylon leaves, 11d. for ordinary, and 81. for brown leaf, with damaged at $4\frac{1}{2}d$. per lb. From another catalogue 3 cases of fair, part country damaged, sold at 6d. per lb.

CROTON-SEED.—Fair bright Ceylon was held for 30s., and ditto, partly dark mixed, 20s. was wanted, 16s. being refused Common dark sold at 15s. per cwt.

CUMIN-SEEDS.—Nice clean quality from Morocco had been sold privately.

ELEMI.—This scarce article again brought very high prices, 11 cases of good fair quality selling with keen competition at from 6l. 10s. to 6l. 17s. 6d., and an odd case at 6l. 5s., subject.

ERGOT.—In auction 22 bags good bold sound Spanish were held for 1s. 9d. per lb. Privately business has been done in Spanish at 1s. $6\frac{1}{2}d$. per lb., c.i.f., and for ton lots 1s. 6d. is quoted. Russian is quoted 1s. $7\frac{3}{4}d$. to 1s. 8d., c.i.f. The s.s. Danube from Vigo has arrived with 67 bags.

GAMBOGE was not offered to-day. The article is very scarce and wanted.

The exports from Singapore to Great Britain from June 1 to July 22 have been 13 piculs only, and to U.S.A. 64 piculs.

GUM ARABIC.—Fair Turkey sorts sold at 44s. per cwt.

HONEY.—Rather higher prices were paid to-day, as supplies were on a smaller scale. Fair white thick Jamaica in casks brought 20s.; half set-white, 18s. to 19s. 6d.; and dark to fair liquid, 16s. to 18s. For brown candied 17s. was paid. Fifty cases from St. Kitts sold from 17s. to 17s. 6d. for dark liquid.

IPECACUANHA.—Rio root was slow of sale, but very firmly held by importers. Of 28 bales offered by one broker only 1 sold at 11s. 5d. per lb. for good bold. Ten bales from another catalogue were bought in at from 11s. 6d. to 12s. A third broker, who offered 4 bales of rather lean and wiry root, sold 2 at 10s. 9d. Cartagena was in small supply, 2 bags selling at 5s. 3d., and for 4 bales 4s. 11d. was refused.

NUX VOMICA.—Fair bright with part pickings sold at 8s. per cwt.

OIL, EUCALYPTUS.—For 10 cases Portuguese, catalogued as globulus, 1s. 3d. was wanted.

OIL, LIME.—West Indian distilled oil sold at 1s. 8d. per lb., which marks no change, and for hand-pressed ditto 5s. 8d. was paid.

OLIBANUM.—A parcel of siftings apparently sold at 21s. per cwt.

PAREIRA BRAVA.—Fair quality from Bahia was bought in at 45s. per cwt.

SARSAPARILLA.—Grey Jamaica is still very scarce, there having been no arrivals of this description of late. For what little is offered 1s. 8d. is asked privately. In auction 12 bales of Lima-Jamaica were offered and sold at from $11\frac{1}{5}d$. to 1s. 1d. per lb, according to damages. Of 7 bales Native-Jamaica offered, 5 sold at from 8d. to 10d per lb, for red and yellow. No other description offered.

SENNA.—Tinnevelly was in small supply, and common grades only were offered, which brought from $1\frac{1}{4}d$. to $1\frac{3}{4}d$. per lb. for ordinary small and medium specky sea damaged leaves. Tinnevelly pods sold at $1\frac{1}{2}d$. to 2d for mostly seadamaged. Alexandrian senna was cheaper, fair whole leaf selling at 5d, and 23 bales siftings at $2\frac{1}{2}d$. Alexandrian pods were 2d. to 3d. lower, nice pale selling at 5d. to $5\frac{1}{4}d$. per lb.

TAMARINDS.—A parcel 77 packages Antigua sold duty-free at 10s. 6d. per cwt. for rather dark and dry, and from another catalogue 25 barrels similar quality also sold at 10s. 6d.

VALERIAN.—Ten bales from Japan were limited, at 40s. per cwt.

WAX, BEES.—Jamaica was in good demand and sold readily at 2s. 6d. advance on previous prices, from 7l. 5s. to 7l. 10s. being paid for fair to good hard red and brown. The only other description sold was Zanzibar, 6l. 10s., subject, per cwt. being paid for sound, and 5l. 15s., subject, for wormy.

Cablegrams.

HAMBURG, August 29:—American oil of peppermint (HGH) is very firm and unchanged. Senega-root has been advanced to 400m. per 100 kilos. Refined camphor is dull of sale at 415m. per 100 kilos. from second-hands, and both menthol and turpentine are firm.

AMSTERDAM, August 29:—The auctions of cinchona-bark held here to-day amounted to 8,033 packages, weighing

707.644 kilos. Of the above quantity, 7,595 packages were disposed of at an average unit of 7.60c per half-kilo, against 9c. paid at the auction on July 18. The following were the approximate quantities of quinire purchased by the principal buyers:—English ard American factories, who purchased the equivalent of 11,417 kilos.; the Brunswick factory, 6.146 kilos.; the Mannheim and Amsterdam factories, 6.561 kilos.; the Frankfort-on-Main and Stuttgart factories, 5.239 kilos.; and various buyers, 5.366 kilos. The prices paid for the manufacturing-bark ranged from $3\frac{1}{2}$ c. to 823. per half kilo, and druggists' bark from $9\frac{1}{2}$ c. to 42c.

Commercial Motes.

Glycerin Imports to U.S.A.

There was a decrease of 7,573,394 lbs. in the imports of glycerin into the United States during the fiscal year ended June 29,1901, the figures being 20,369,712 lbs, against 27,943,106 lbs. for the previous fiscal year of 1900. This decrease is said to be due to the fact that last year's importations were excessive, and a large amount of glycerin was carried into stock. There has been no decrease in the demand, and some of the New York dealers claim the consumption is even greater than for the past few years.

Large Find of Ambergris.

From Point Conception, California, comes news that a valuable find of ambergris was made there on August 15, the value of which promises to reach \$40,000. F. W. Walriven, a bridge carpenter, T. J. Reddington, agent at Conception, and J. Bosby, found a large mass of whitish oily stuff about 140 lbs. in weight. They sent specimens to Santa Maria and to San Flancisco for analysis. The report received proves the substance almost pure ambergris, and its value the amount stated above.

Corean Ginseng.

The export of ginseng from Chemulpo during 1900 amounted in value to 154,740*l*., against 37,979*l*. in 1899. The increase was due to the fact that the quantity exported in 1900 included half of the crop of that year in addition to the whole crop of the year 1899. In the autumn of last year the Corean Government entered into an agreement with the Mitsui Busson Kwaisha, a Japanese firm, under which that firm were made the agents for the sale of the ginseng-crops for the three years 1900, 1901, and 1902, receiving as agents a commission of 2 per cent.

The German Tariff.

The question of the proposed new tariff and of its probable effect on British commerce has been referred for consideration to the Board of Trade Advisory Committee on Commercial Intelligence. It is understood that the secretary of the committee will in a few days forward a circular to the principal Chambers of Commerce and other similar bodies interested, enclosing a translation of those sections of the tariff which appear more particularly to affect British traders, and inviting the observations of such bodies. A translation of the proposed tariff, with comparison as far as possible, thas been issued by the Board.

French Castor Oil.

In a report received from H.M. Consul-General at Marseilles it is stated that the quality of Indian castor-oil seed, of which 25,584 English tons were imported last year, has deteriorated since 1898. The crops have been very variable, but it is thought the quality might be improved. Java seed, of which 15 tons were received last year, was considerably superior. These variations in quality are a source of trouble to the oil-manufacturer, and much of his success depends on his being able by careful manipulation to make up for the inferior quality of some of the seed. The Marseilles castor-oil millers appear to be feeling British and other European competition, but in the manufacture of medicinal castor oil their success is due to the climate, air, and the sun. Two other conditions also favour the Marseilles manufacturer in all qualities—viz., cheap labour and a ready sale for oil-seed cake. Italians are employed, working eleven hours in the twenty-four, at from 2s. 5d. to 3s. 3d. per day. The men work on day and night shifts, a ternating weekly. The castor seed residue amounts to 60 per cent.; 15,000 to 18,000 tons of oil-cake are annually consumed within a short radius of Marseilles by market-gardeners for the raising of early vegetables.

BED-SORES.—In the Bloemfontein Hospital bed-sores are treated by painting from the day of their appearance with a hardening-solution consisting of a saturated solution of tannic acid in spirit of camphor.



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

That Smart Young Man.

SIR,—We understand that the individual who has been busy in London lately placing orders and obtaining loans on false representation has assumed the name of "Mr. Raimes, of York," on one or more occasions. This particular form of fraud has been practised so often that we should have thought all our London friends would have been on their guard against it. In any case, however, we should like to give notice that there is no Mr. Raimes connected with our firm, and that no one has authority to place any orders on our behalf, except in the usual way—by written order from York.

Yours faithfully,

York, August 26. RAIMES & Co.

"Craft."

SIR,—Mr. Bell in his courteous letter refers to Chaucer. Pharmacists of all men ought to live for, hope for, and work for the future, and leave the dead past to bury its dead. Nevertheless, I am willing to go back to the fourteenth century when Chaucer marshalled an excellent representation of the men of his time, including farmers, lawyers, chirurgeons, Churchmen, and five men representative of the crafts-viz., a haberdasher, a carpenter, a weaver, a dyer, and a tapestry-maker—and he is careful to represent each as appearing in the livery of his guild. The excellent paragraphs on Chaucer which appear in "Cassell's Universal History" give further information on that point. It was at a much later date than that of Chaucer, that the meaning of the word "craft" became widened amongst the common people to include artists, surgeons, lawyers, and even Churchmen. This was probably due to the fact that during the sixteenth and the greater part of the seventeenth centuries the vast majority of the people posed as wits, which amongst the uneducated classes always leads to extensive misuse of terms and general language. During the nineteenth century, so far as the word "craft" goes, we reverted to the Chaucerian meaning, and the line of demarcation between craftsmen and professional men became well derned. There are still a number of "sloppy" writers and careless journalists who use the term "craft" when speaking of novelists, artists, surgeons, &c., but they do not in any way influence the opinions of the common people in regard to the meaning of the word. It is now universally recognised that the term "craft" applies only to such trades as Chaucer instances, but the term "profession" is applied generally to a very large number of callings. Not only medical men lawyers, bankers, Churchmen, but teachers, civil servants, engineers, architects, sanitary inspectors, nurses, and many others are now placed on the list of professional persons by the common people. So far as I know chemists are the only educated men who persist in placing themselves amongst the craftsmen. But I have said more on the subject than I intended, and I shall probably not refer to it again. Regarding the use of the titles "professor" and "doctor" by quacks, I can only repeat that learned bodies onght to conserve their titles better. When I was speaking of our titles to a prominent M.P., he called my attention to this very abuse of medical titles.

I note the fight between Mr. Glyn-Jones and what "Xrayser"calls "the proud oligarchy of Bloomsbury S puare." I am quite at a loss to know why Mr. Reece was prosecuted. At first I thought the triumph in his case might be made a weapon against the Stores, in which case it would have been of the utmost importance, but, on further consideration, I have changed my mind. If stores can keep open shop because corporate bodies are outside the Pharmacy Act, the

logical conclusion is that they can use any titles and designations they like for the same reason. So it comes about that a qualified man can be prosecuted because he is qualified for an offence which another may be guilty of with impunity because he is not qualified. Pharmacy law as applied just now is almost entirely judge-made, and nothing can bring order out of chaos but fresh legislation.

Dumfries, August 26. JAMES REID.

A Census of British Pharmacy.

SIR,—In your issue of August 17 I observe a very sensible letter on "A Use for Divisional Secretaries," signed by "One of the Crowd," which has not, I fear, received the attention it should have done, and which may, perhaps, be attributed to the lack of energy produced by the exceedingly hot weather we have recently experienced, or to the fact that many people are just now on holiday bent, including, I hope, a fair sprinkling of the chemist fraternity. Whilst not entirely endorsing all "One of the Crowd's" proposals as practical, still I think that a very useful amount of information might be obtained by our divisional secretaries in a discreet manner and at very little cost to the Pharmaceutical Society, certainly at far less cost than "Xrayser" seems so suppose. That the information is desirable is a question of which there can be no doubt whatever, and that the present is the proper time to obtain it is also perfectly clear. We all know how very easy it is for opponents or obstructionists of any new measure to delay progress by demanding statistics, and so sometimes succeeding in shelving for a time useful and necessary reforms which they could not do by tair argument. Now the Council of the Pharmaceutical Society, when it asks Parliament to pass the Pharmacy Bill, will be immediately confronted with the question, "What proof have you that so many shops are now open for the sale of poisons which are conducted by unqualified men?" The information should be at our finger ends, and if our divisional secretaries can supply it, why not have it compiled and ready for u e when required? With regard to the remarks of "Pharmaceutical Chemist" on this subject, in your issue of August 24, surely the courtesy of a halfpenny postcard to our Registrar was not too much to expect when he could have informed this official of his change of address, and thus saved himself any temporary annoyance he experienced. Really, as a loyal member of the Society, he ought to have been exceedingly pleased to find the Society was so active in looking after his interests.

Yours faithfully,

South Shields, August 27. ALEXANDER ELLIS.

More Glyn-Joneses Wanted.

SIR,—I am under the impression that Mr. Glyn-Jones is amongst the number of retiring Councillors next year; if this is so, I would suggest that he use his influence to induce some kindred spirits to become candidates, and thus form a "Glyn-Jones Caucus." If this could be arranged I would beseech every man on the register to become a member of the Society, thus secure a vote, and use that vote to return the above-named caucus. This is the only way I can see at present for our getting progress. By repeating the operation at each election we could obtain an entirely new Council. It is imperative to obtain this result that every member of the trade should join the Society. As an alternative I would suggest that every member cease to subscribe, and the Society would soon be non est. The Society would then throw up its charter (as suggested by "Pharmaceutical Chemist" last week), and the Privy Council would be compelled to make fresh regulations. A society that has done so little as ours is not worthy of being entrusted with a charter.

Leicester, August 24.

M.P.S. (244/38.)

Dispensing Notes.

A section for the elucidation of difficulties and interchange views on dispensing-problems.

Ichthyol and-Zinc Cream.

SIR,—In the \mathcal{C} . \mathcal{S} D., August 10, there is an inquiry for a satisfactory way of making a zinc cream c. ichthyol. The addition of 3j. lanolin to the recipe will make a product

pleasing to both him and the prescriber. Dissolve the lanolin in the oil with heat, stir in the lime-water, then the oxide of zinc, and finally the ichthyol.

Yours, &c., J. H. (234/74.)

The Making of Pills.

SIR,—Whatever comes from Mr. Ince's pen is always thorough and very good. He is a past master of high degree in pharmacy. The order of mixing is, however, an important one in pill-building, as in many other pharmaceutical and chemical operations. I write this to suggest a fresh order of things, which has been recommended to and used by students with the writer during the past fifteen years—viz., to add gradatim the well-mixed ingredients to the excipient contained in the mortar. It has been found in a great number of cases that such a simple procedure requires less of the mortar than the bricks, and—what is dear to the heart of the embryonic pharmaceutical—much less elbowgrease in the kneading. Perhaps others will try the plan. The buffer-question in making pills is an extensive one, and some day we may be favoured with a chapter on it by Mr. Ince. Ex gratia exempli:—

Mastic gr. ij.
Sodii bicarb. gr. j.
Calomelanos gr. j.
M. Ft. pil.

Some plans will yield pimples in a very short space of time, especially if spirit, aqueous media, and that pill-maker's fiend, tragacanth, be used. No doubt mastic is the buffer here, but its careful handling is an essential part of the whole matter. Yours truly,

August 19.

ABEL SCHOLAR. (216/6)

Legal Queries.

Before sending in a query for reply in this section see if the subject is not dealt with in "The Chemists' and Druggists' Diary," 1900, pages 212-226, and pages 259-262.

241/25. *Indenture*.—Indentures of apprenticeship be tween a chemist in Great Britain and a parent residing in Ireland are as enforceable regarding the latter as if he resided in Great Britain.

229/20. Fortior asks how a label for castor-oil pills with a notification to the following effect would satisfy the Sale of Food and Drugs Acts inspectors: "This medicine is so-called because it is a safe and efficient substitute for castor oil. It does not contain that drug." This is an adequate notice if purchasers see it before they pay their money.

229/25. Pharmacist.—(1) You are quite right in refusing gratis copies of a prescription to others than the original patient. The copy which you have is your property, and any copies that you make and supply with the sanction of the patient should be charged for. (2) A chemist and druggist is not justified in translating a doctor's Latin prescription into English to satisfy the curiosity of the patient. Such translation is not illegal, but it is a breach of the faith existing between prescribers and dispensers.

228/6. W. T. F.—The gripe-water label which you send us is printed in blue ink (like Wcodward's); it starts with the phrase "Important to Mothers" (which Woodward uses); a picture is on it of a baby and nurse (there is also a picture on Woodward's), and, although there are points of difference, there are sufficient of similarity to enable an average lawyer to establish a case of colourable imitation.

235/29. Lux.—"Safety chlorodyne" without morphine will be a case of "out of the frying-pan (the Pharmacy Act) into the fire" (Sale of Food and Drugs Acts or Merchandisemarks Act).

240/1. Juno.—A partnership may legally be dissolved from the date of the last stocktaking, in which case the retiring partner accepts remuneration agreed upon for his services from that date.

239/34. C. A. S.—You do not tell us whether the shop is your own property or if you are tenant. If the latter is the case and the tree was in front when you entered upon the tenancy, all that you can do is to call upon the local authority to prune the tree occasionally for the safety of your shop.

240/17. Crome.—The shilling summons-fee can be recovered by the rates-collector, if you refuse to pay it, by his proceeding with the case in open court and getting judgment for it.

241/48. Saline. — Effervescing salines, composed of mineral or inorganic substances, and not used as vehicles for such remedies as caffeine, are exempt from medicinestamp duty. If your saline is of the former nature the recommendation bill does not make it liable.

239/5. G. P. O.—A spring-balance or any other weighing-machine or weight used in a post-office for weighing parcels need not be verified. We do not understand what you mean by saying that you cannot get the spring-balance stamped "like other scales," as "weighing-instrument" of the Act should include spring-balances.

245/61. C. D. S.—There is little difference in sound between such words as, eg., "Nipa" and "Nippo," that if one of them is registered as a trade-mark the owner of that mark would have good grounds of action against the user of the other for the same class of goods. The Courts always give protection to the first man in the field, especially when he proves that those who follow him desire to take advantage of the demand he has created. That may not be so in your case, but the principle will guide you in selecting a distinctive mark—that is, one not at all like an existing mark. Originality is the secret of success in trade-mark registration and use.

Information Supplied.

NOTE.—Subjoined are replies to queries printed in previous issues as indicated by the numbers. It is requested that any writing to the firms named will mention "The Chemist and Druggist" as the source of their information.

206/45. The maker of Grübler's aniline dyes is Dr. Grübler, Leipsic, Germany.

191/24. Fränkel's nasal irrigator can be obtained from Dietzsch & Co., chemists, 90 Chiswell Street, London, E.C.

225/21. The London agents for Fels-naptha soap are Sales Co. (Limited), Peninsular House, Monument, London F.C.

235/1. A. C. E.—Any of the large bottle-manufacturers advertising in C. § D. and DIARY will supply you with Tobin square bottles.

Information Wanted.

Postcard replies to any of the subjoined inquiries will be esteemed.

246/68. Makers of laundry or glossing balls.

97/96 Agent or makers of "Porcin" pig-powders.

243/11. Address of Blumberg & Co., violet-powder makers.

 $247/15.\,$ Makers or some particulars about "Crystallose" and "Hepaticura."

243/66. Where can 5-oz. round sauce-bottles be obtained in small quantities?

95/96. Address of Murray's gout-specific, also of makers of "tablids" of lemonade and orange phosphate.

[&]quot;Doctor, you told me three months ago that if you didn't perform an operation on me I would be a dead man in twenty-four hours." "Well, sir, I was wrong, and I can only express my great sorrow for it."



